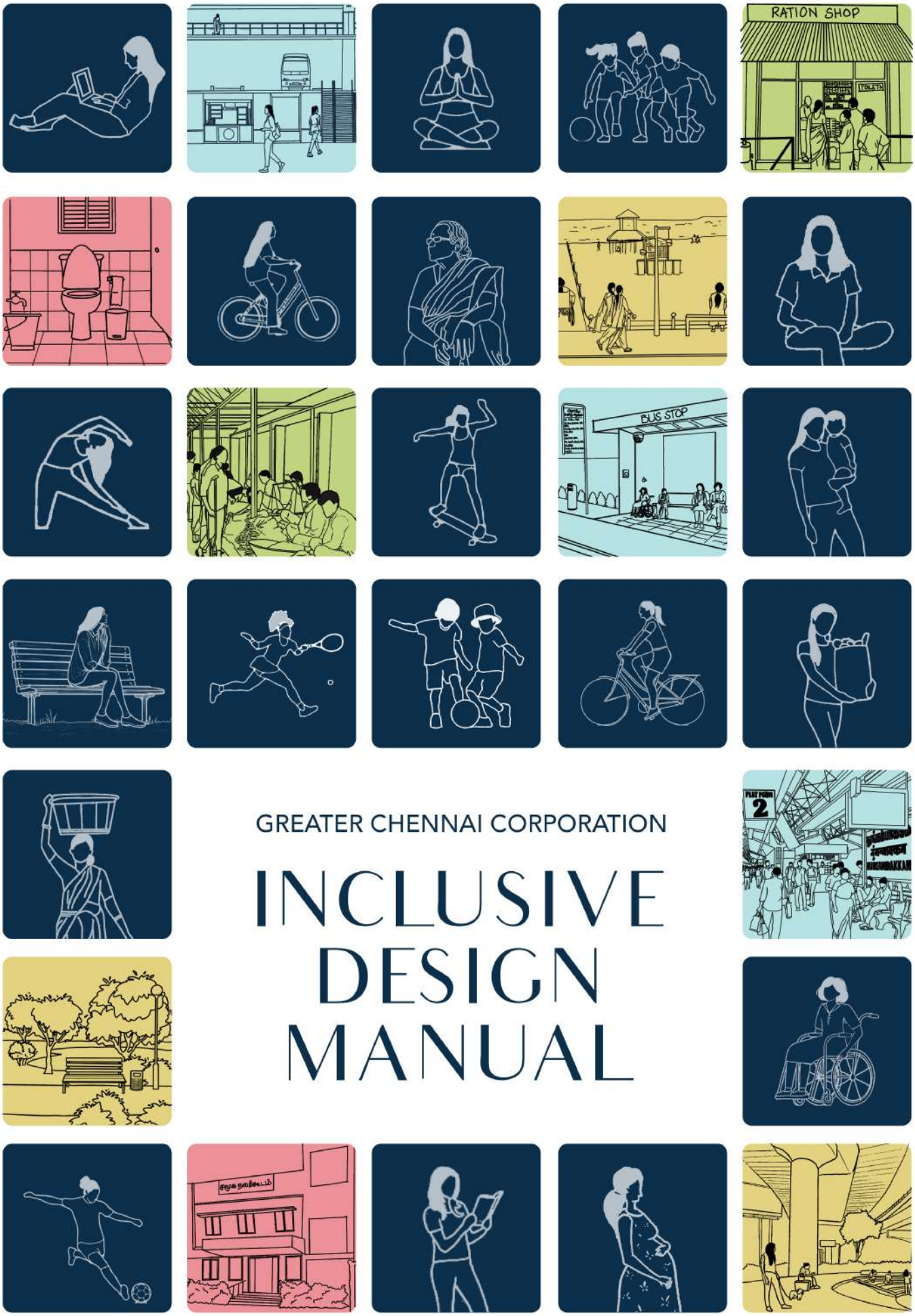

GREATER CHENNAI CORPORATION

INCLUSIVE DESIGN MANUAL

GENDER & POLICY LAB
GREATER CHENNAI CORPORATION

GREATER CHENNAI CORPORATION
INCLUSIVE DESIGN MANUAL

Manual with gender inclusive guidelines for urban infrastructure design to enable women's safety and access to public spaces.

May, 2025

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Developed and Published by
Gender and Policy Lab & Greater Chennai Corporation (GCC)

Development of the Manual is supported by Nirbhaya funds

Disclaimer: This manual presents a comprehensive set of inclusive design recommendations developed through research and stakeholder consultation. However, not all guidelines may be universally applicable. The intent is to serve as a reference framework—to be adapted based on the local context, site conditions, and community needs. Users are encouraged to interpret and apply these recommendations with sensitivity to specific geographies, infrastructure types, and governance realities.

Acknowledgements

This manual is the result of a collaborative and collective effort involving individuals and organisations committed to advancing equity, safety, and dignity in public infrastructure design. We would like to extend our deepest gratitude to Sameeran IAS, Joint Commissioner (Works), and Sharanya Ari IAS, Deputy Commissioner (Education), Greater Chennai Corporation, B.V Babu, Superintending Engineer, Special Projects for their leadership, encouragement, and support during the initial phases of this project.

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We would like to thank the World Bank Chennai City Partnership Team for their constant support for the Gender and Policy Lab and for supporting this important work.

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- Kanika Bansal, Lead – Universal Design and Inclusion, Inclusive Cities Centre, NIUA
- Aishwarya Bali, Associate, NIUA

Their inputs have been instrumental in refining the scope, clarity, and relevance of this manual for a diverse set of users and stakeholders.

To the many women and gender-diverse individuals across Chennai who shared their experiences, aspirations, and critiques during the research process—this manual exists because of your voices. Thank you for showing us what the city could and should be.

From the Mayor

Tmt. R Priya
Hon. Mayor of the Greater Chennai Corporation (GCC),
Government of Tamil Nadu

As Mayor of Chennai, my foremost responsibility has been to ensure that the city works for everyone, especially women, children, elderly people, and persons with disabilities. My focus has been on creating equal opportunities and improving access, safeguarding the commitment of Honorable Chief Minister, M.K Stalin and Government of Tamil Nadu's 'Ellarukum Ellam' (everything for everyone). I am delighted to present this manual as an extension of my work towards inclusivity.

Our parks, playgrounds, streets, bus stops, homeless shelters, and e-Sevai Maiyams are not just facilities — they are essential public services and lifelines. These spaces must serve everyone equally, irrespective of gender, age, ability, or economic background.My vision for Chennai is one where young women and girls can freely walk, express themselves, and feel safe in public spaces. That's why I launched EmpowHer, an initiative to establish women-only gyms and why we are continually creating and rejuvenating parks and playgrounds across the city.

I am heartened that this manual reflects these values. It is not a top-down document, but one shaped by consultations with people on real urban concerns. It stands as a testament to the diligent work done by Gender and Policy Lab (GPL) over the past three years to improve GCC-infrastructure and mobility in the city. In covering 12 GCC infrastructures that include parks, playgrounds, streets, bus stops, homeless shelters, and e-sevvai mayyams among others, it seeks to empower residents who have expressed what they need to live comfortably and with pride in their areas.

Chennai's infrastructure should be designed such that people from the margins, cutting across gender, age, abilities and socio-economic backgrounds have the same access and opportunities as all others. They are all part of the city and it is essential to focus on their needs in the planning of infrastructure. I urge all professionals involved in shaping our city's future to embrace the guidelines presented in this manual.

Together, let's make Chennai an example of what it means to be truly inclusive — a city that embraces its diversity and leads with compassion and innovation.

Photo Credit: Flikr

From the Deputy Mayor

Thiru. M. Mahesh Kumar
Hon. Deputy Mayor of the Greater Chennai Corporation (GCC),
Government of Tamil Nadu

As the Deputy Mayor of Chennai, it is my vision to build public infrastructure that truly serves everyone—especially the elderly, persons with disabilities, women, children.

I am glad to see that vision reflected so strongly in this Gender Inclusive Design Manual. This is not just a technical document, it is a vision reflecting in the design.

This manual was built from the ground up—through field audits, research, and honest conversations with communities across Chennai. What makes it powerful is its practicality. It doesn't offer abstract ideals; it gives us real, scalable solutions rooted in everyday realities.

I commend that Greater Chennai Corporation is moving towards more inclusivity with Gender and Policy Lab leading this effort. This Manual reminded us that inclusion isn't a bonus—it's a necessity. It's how we build a Chennai that is not only functional, but equitable, affordable and for everyone.

Let this manual be our guide as we build a Chennai that truly belongs to everyone and a city which reflects the ethos of Government of Tamil Nadu, 'Ellarukkum Ellam'

From the Commissioner

Thiru. J. Kumaragurubaran, IAS
Commissioner of the Greater Chennai Corporation (GCC), Government of Tamil Nadu

Chennai has emerged as a forerunner among Indian cities in inclusivity and safety, thanks to the decades of political will, progressive government reforms and institutions echoing principles of social justice. The Government of Tamil Nadu and the city of Chennai have been moving towards inclusivity by adapting Tamil Nadu State Policy for Women state and incorporating policies for women with disabilities in various aspects.

As a department within GCC, the Gender and Policy Lab (GPL) works to support this agenda by focusing on gender mainstreaming governance and improving the safety and accessibility of urban spaces. GPL has been helping GCC's services be more accessible and safe for women through audits of public spaces, ensuring bus shelters follow universal design guidelines, sensitising zonal engineers on inclusivity, and establishing gender clubs in schools.

As an extension of this work, GCC in collaboration with GPL has developed this inclusive urban design manual. It aims to standardise inclusive features within public spaces, enabling the city to foster equitable access to infrastructure, services, and opportunities for individuals across the gender spectrum, ages, and abilities. Structural gaps that inhibit inclusivity in 12 commonly used GCC-infrastructures were identified through a research-intensive and collaborative process. In response, a set of design guidelines and a practical checklist have been provided to translate these findings into actionable interventions.

To build a truly inclusive Chennai, equity must be embedded into the very foundation of urban design. Addressing the unique challenges of age, gender, ability, and socio-economic diversity requires sustained, targeted planning. The city's infrastructure must be reflective of the people who live in it—enabling all to participate fully in public life.

This manual is a call to action: to centre marginalised voices in planning and move beyond symbolic inclusion. I urge government officials, engineers and urban planners to apply these guidelines from the ground up. Let us build a Chennai where equity is not just a principle on paper, but a lived reality in every space we build and use.

Photo Credit: The Hindu

From the Deputy Commissioner

Thiru. Sivakrishnamurthy V, IAS
Deputy Commissioner (Works) of the Greater Chennai Corporation (GCC),
Government of Tamil Nadu

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GENDER & POLICY LAB
GREATER CHENNAI CORPORATION

The Gender and Policy Lab (GPL), housed within the Greater Chennai Corporation,was established in April 2022 under the Nirbhaya Fund as part of Chennai city Partnership project between the Govt. of Tamil Nadu and World Bank. It is the first such initiative to be embedded within an Urban Local Body in India. Since its inception, the Lab has sought to address women's safety and mobility through research, awareness-building, and integrated infrastructure development.

Over the past three years, GPL has been exploring the question, 'How do we make the city work for everyone?" What do young women and girls want from the city?'

To better understand their needs, The Gender and Policy Lab works across four core pillars: Research and assessments, Policy support, capacity building, strengthening operations and infrastructure development.

Message from the team

Chennai — India's fourth-largest metropolitan city — has earned recognition as one of the safest cities for women and has pioneered several inclusive urban initiatives, such as India's first beach access path for persons with disabilities at Marina Beach, free bus services for women, and state-sponsored working women's hostels. As the city continues to grow, it is vital that its infrastructure evolves to meet the needs of its diverse residents.

Public spaces are more than just infrastructure—they are where the city comes alive. They offer room to breathe, connect, and just be. For many, they are places of possibility. For women, they must be places of comfort and safety—where they can walk freely without looking back, rest without worry, and express themselves without fear. Public spaces should not be places to avoid, but places where women feel they truly belong.

Encouragingly, recent Gender Lab surveys show that 80% of women in Chennai feel the city is safe, and over 70% report that government public facilities are accessible. These women have also expressed the need for more responsive and well-designed public parks, continuous footpaths, clear signage, and other improvements that enhance comfort, safety, and mobility.

At the Gender and Policy Lab, supported by the Nirbhaya Fund—a fund dedicated to improving women's access to public infrastructure—we've been working to understand how men and women use public spaces differently across Chennai. From parks and footpaths to toilets and bus stops, we study everyday patterns to help make the city more inclusive. We ask questions about how the Chennai context is different: What does feeling safe mean? Can small, incremental changes—like adding a hook at the back of a bathroom door—change someone's experience of public toilets? When 24.5% of women choose a public route based on safety, what kinds of changes are needed in first-mile and last-mile infrastructure?

Over the last three years, we have conducted over 725 audits across bus shelters, parks, foot overbridges, toilets, and footpaths. These insights have been included in this manual, and our research shows that there are different gendered usage patterns of public infrastructure. Women often use parks in the evening and prefer spaces with good lighting and seating near children's play areas—allowing them to supervise children and relax. These insights show that these patterns can be addressed through design. That's why we believe gender-inclusive design is not abstract; it is immediate, tangible, and deeply local.

Yet, turning these insights into action is where the real challenge lies. In our early work with Greater Chennai Corporation engineers, we noticed a pattern—design changes were being made in response to specific feedback, like fixing a toilet in a few neighbourhoods or improving lighting at a particular transit station. While these were important wins, they were also highly localized. That's when we recognised the need for a more standardised, scalable approach to inclusive design.

During consultations with GCC zonal engineers and civic staff, 61.2% of them stated that the "lack of standard designs/models" was one of the main challenges they faced while executing projects. The other recurring concern was: "We understand the need for gender-sensitive infrastructure, but *ena pananum-nu sollunga* (Tell us, what exactly do we have to do)?"

At the same time, other government bodies—like the Tamil Nadu Highways Department and the Tamil Nadu Housing Board—began reaching out, expressing interest in incorporating gender-inclusive designs into their own projects. It became clear that the learnings from Chennai could inform a broader shift. That's how this manual was envisioned.

This manual was created to bridge that gap. Grounded in eight focus group discussions, twelve audits of public spaces, and expert roundtables with users, community members, planners, sociologists, and engineers, it brings together practical tools and lived insights. It translates the city's commitment into context-sensitive design interventions.

Executive summary

The Gender Inclusive Design Manual developed by the Greater Chennai Corporation's Gender and Policy Lab marks a significant shift in how public infrastructure is approached. It focuses not on abstract ideals or policy frameworks but on the lived experiences of women and gender-diverse people navigating the city. It recognises that public infrastructure, though intended for all, often excludes, alienates, or endangers many by design. Through a design lens, this manual challenges the assumption that infrastructure is neutral and demonstrates how spaces can—and must—be more inclusive, accessible, and comfortable for everyone.

Across Chennai, sustained community engagement and increasing public awareness have highlighted the need for everyday infrastructure to better serve all residents—particularly women, the elderly, persons with disabilities, queer and trans individuals, and those from socially and economically marginalised communities. These ongoing conversations have led to a growing recognition that inclusive design is not only a matter of equity, but also a key driver of a vibrant and resilient city. When streets, parks, transit systems, and public spaces are accessible and welcoming to all, participation in education, employment, civic life, and cultural activities increases. Infrastructure is utilised more effectively, service delivery improves, and social cohesion is strengthened.

Recognising the need for inclusion-focused design standards, the Gender and Policy Lab, under the leadership of the Greater Chennai Corporation, initiated the development of this Gender Inclusive Design Manual in August 2023. This manual is both practical and reflective, created to support engineers, architects, contractors, and civic actors in designing public spaces that are not only functional but affirming diverse user needs.

The manual was developed through a rigorous research process that began in March 2024. It builds on earlier studies by the Gender Lab, incorporates insights from local fieldwork, and is informed by global best practices—bringing together diverse perspectives to ensure the guidelines are relevant, grounded, and ready for application across Chennai's urban fabric. Twelve types of public infrastructure were identified for the study, ranging from parks, beaches, markets to toilets, bus stops, and shelters for the urban homeless.

The study design integrated field-based inquiry with user-centred insights. A detailed mapping and audit of 25 infrastructure sites was undertaken across North, Central, and South Chennai to capture diversity in social context and physical form. This included observational studies, physical assessments, and spatial audits. This was followed by in-depth qualitative research through focus group discussions with over 80 participants including young women, trans and non-binary individuals, sanitation workers, women with disabilities, migrant workers, and others. These conversations explored how people move through the city, what they avoid or gravitate toward, what makes them feel safe, and how design affects their ability to participate fully in public life. Their insights were concrete, design-specific, and directly rooted in daily experience—forming the core of this manual's recommendations.

Each chapter in the manual focuses on a specific infrastructure type and is structured through eight key lenses. It begins with an overview of existing conditions, using Chennai-specific data to identify high-impact improvements. It then examines how the infrastructure interacts with surrounding land use, followed by an assessment of how people access the site—on foot, by transit, or by private vehicle—and move within it. The manual also addresses spatial planning, amenities that enhance comfort, and safety through both physical and perception-based elements.

A key component of the manual is a checklist-based assessment tool included in each chapter that allows both professionals and members of the public to evaluate infrastructure projects through a gender inclusion lens. Alongside, a scoring framework enables project teams to prioritise interventions and guide retrofit strategies where needed. These tools aim to bridge the gap between policy intent and on-ground implementation by offering clear, actionable recommendations rooted in everyday realities.

Beyond the infrastructure chapters, the manual includes sections on materials and specifications, operations and maintenance, and the role of social change. It emphasises that inclusive design must be supported by durable choices, consistent upkeep, and efforts to shift behaviours and perceptions for lasting impact.

The manual is grounded in five design principles—access, visibility, experience, comfort, and safety—which run through every chapter and recommendation. Together, these offer a vision of gender-inclusive design that is not aspirational but actionable. Inclusion here is not treated as an optional feature or add-on; it is the very measure of good design.
Ultimately, this manual is a call to reimagine the everyday city. It demonstrates that inclusive design is not only possible but essential to building fair, functional, and responsive urban infrastructure. It urges Chennai—and cities everywhere—to build with care, to listen more closely, and to design for everyone.

Contents

Photo Credit: ITDP

INTRODUCTION

Photo Credit: New Indian Express

WHAT IS GENDER INCLUSIVE DESIGN?

Gender Inclusive Design is a strategic and evidence-based approach to building infrastructure that acknowledges the diverse identities, roles, and experiences of individuals across the gender spectrum. Gender is not a binary concept, but a spectrum of identities that shape the way individuals navigate, experience, and engage with public space. It goes beyond conventional notions of gender, recognizing that public spaces are experienced differently by women, girls, transgender, and non-binary individuals due to intersecting factors such as safety, accessibility, mobility patterns, caregiving responsibilities, and social norms. In doing so, it reimagines public spaces not just as neutral backdrops, but as active agents that can either reinforce or challenge existing social inequalities.

Public spaces are where people connect with their city — walking, waiting, working, resting, selling, protesting, or playing. These spaces, however, are not always designed to accommodate the complex social realities of gender. Design can either create barriers or open up possibilities. Thoughtfully designed streets, parks, transit stops, and community spaces can make daily life more secure, more dignified, and more equitable.

WHY DO WE NEED GENDER INCLUSIVE DESIGN?

Design shapes experience.

Poor design and inadequate infrastructure can affect everyone, but their impacts are uneven. For example, a dimly lit street may feel unsafe or unwelcoming to all, but due to existing social norms and safety concerns, it disproportionately restricts women's mobility, often preventing them from accessing that space altogether. Similarly, a high-floor bus may inconvenience many passengers, but for persons with disabilities, it can be a major barrier that limits their independence and participation. Uneven or broken footpaths create difficulties for everyone, yet 94.4% of women report regularly walking with two bags, making such obstacles particularly challenging and discouraging for them.

These everyday examples illustrate how intersectionality compounds the effects of poor design — where gender, disability, and other social factors overlap, the consequences become even more severe. When infrastructure fails to consider these diverse experiences, it not only limits individual lives but also limits the city's social, economic, and cultural vitality.When design does not account for gendered realities, it creates barriers — to comfort, to safety, to access, and to participation.

In Chennai, these challenges are not new. The demand for more responsive public environments have created a strong foundation for institutionalising more inclusive practices. There is great potential to improve design by moving beyond one-size-fits-all approaches and fostering better coordination between departments—prioritizing empathy alongside efficiency to create truly inclusive spaces.

- For individuals, inclusive public spaces improve daily life—enhancing comfort, safety, and access for all users.
- For communities, they support caregiving roles, enable informal livelihoods, and strengthen everyday social connections.
- For the city, they optimise the use of shared spaces—fostering equity, wellbeing, and resilience.
- For governance, they offer a pathway to align policies and infrastructure with lived realities—ensuring responsive, inclusive, and effective urban development.

Design is a powerful tool that shapes how people experience their environment. When approached inclusively, it can break down barriers and contribute to a more just and vibrant city.

This manual offers practical guidance on design interventions that make public spaces welcoming, navigable, and safe for everyone. By focusing on visibility, comfort, access, and care, Gender Inclusive Design becomes a strategic framework to enrich public spaces—not only in their function but also in their social and emotional impact.

At its core, this approach ensures dignity, presence, and meaningful participation—ensuring that everyone can fully experience and engage with the city.

"I live in this city and if I have to be happy in the city I should feel comfortable, safe, and go where I need to go, when I need to go. I want Chennai to be the city that makes me happy."

- Nakshatra Mythili, 34, Chennai

"For us, it's about a future where every space, every journey, every opportunity is open to us. Where we move with ease and joy, not burdened by barriers."

- Radha Rajan, 66, Chennai

"A city where women's voices are heard, where we are part of the decision-making process – that's what I dream of. Not just being seen, but being listened to."

- Gayathri Venkatraman, 25, Chennai

"My only problem with Chennai is the lack of lighting. Once, while walking alongside the Egmore flyover, I realized there are no lights and a lot of bushes adjacent to the compound walls. It would be so easy for someone to jump from the wall and attack someone without getting caught."

- Dhanushiya, 22, Chennai

"Recently I went to a park. There was nothing there for us. There's only facilities for kids. One day me, my brother and sister had gone. We took a photo but there was an incharge said you can't take photos and all."

- Logeshwari, 48, Chennai

"All parks should have toilet facilities. Especially for girls. CCTV should be there. Lighting should be proper. We need a peaceful environment in the park with trees and less restrictions."

- Dharshini, 20, Chennai

Photo Credit: Shuchi Kapoor

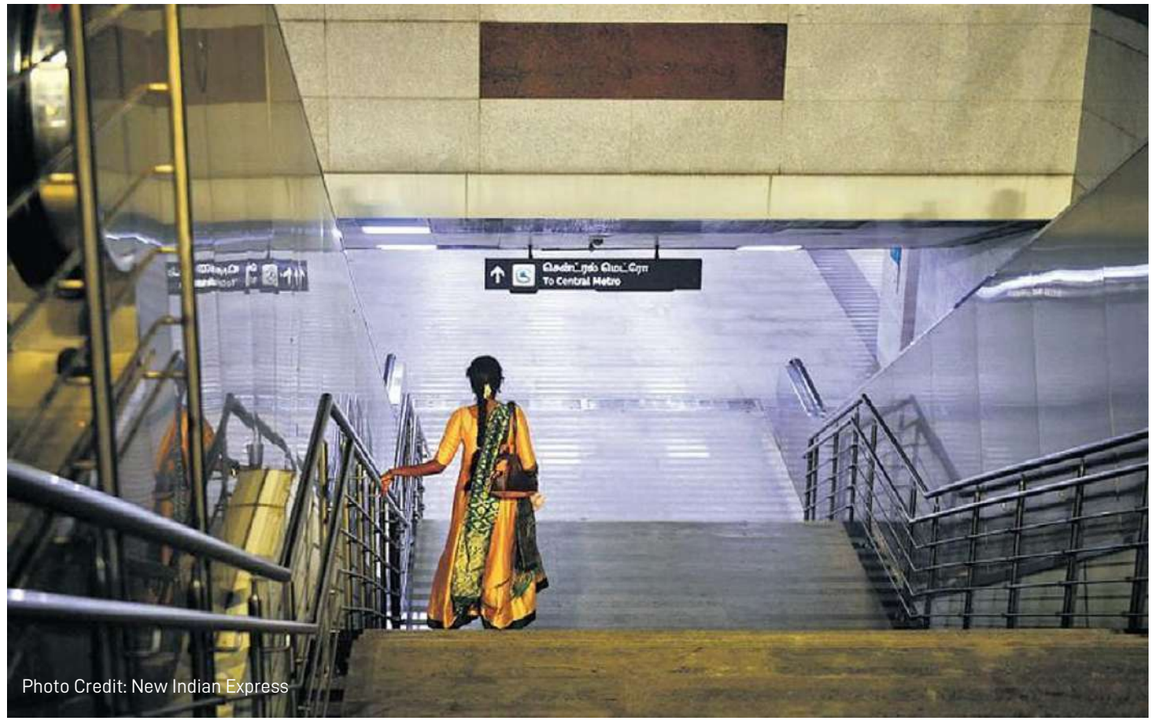


Photo Credit: New Indian Express

OBJECTIVES OF THIS MANUAL

This manual is intended to function as a citywide capacity-building tool, aiming to address gender through the lens of design. It brings together learnings from community voices, on-ground observations, gender studies, and inclusive design thinking to guide the transformation of 12 key urban infrastructure typologies across Chennai. It is written for a broad audience — from engineers, architects, and planners, to consultants, contractors, administrators, and even the public.

Its key objectives are to:

- Offer practical, scalable design guidance that integrates gender-inclusive principles into Chennai's built environment.
- Promote awareness among city officials and design professionals of how design decisions directly impact comfort, safety, and usability for diverse genders.
- Encourage a people-first design approach, where spatial solutions are grounded in the lived realities of users, not generic templates.
- Act as a learning and reflective tool to question existing practices and explore more empathetic, inclusive alternatives.
- Bring multiple perspectives into a single conversation — combining technical, social, and experiential insights to shape holistic design outcomes.
- Enable greater public participation and accountability in infrastructure development.

A distinctive feature of this manual is the inclusion of practical checklists with scoring tailored for:

- Engineers, architects, and administrators overseeing the design and execution of public infrastructure — to ensure that inclusion and safety are embedded at every stage of a project.
- The public and community members — empowering them to assess, reflect, and contribute feedback on the inclusiveness and usability of public spaces in their neighborhoods.

By embedding these tools within the design process, the manual encourages a culture of shared responsibility and continuous improvement — where gender inclusion is not an afterthought, but a foundational element of design practice.

Through this initiative, the Greater Chennai Corporation signals a shift: toward a more responsive and participatory approach to city-making — one where every design detail contributes to a more just and caring urban experience.

Making of this Manual: Research Methodology

This manual is grounded in an extensive, field-based research process that prioritised lived experience, spatial equity, and design responsiveness. It was developed to address a specific scope and understanding of public space and people as relevant to the context of Chennai.

DEFINING PUBLIC SPACE AND USERS

For the purpose of this project, public space is defined as state-sponsored infrastructure that people gather in to access a service, for leisure, livelihoods, commute, or shelter. This does not include public institutions such as banks, hospitals, courts, police stations, or shelters governed by other departments.

The term "people" in this project refers primarily to women across a wide range of age groups, socio-economic backgrounds, abilities, sexualities, and gender expressions, including trans and non-binary persons — recognising the diversity of their experiences and their interactions with urban space.

RESEARCH PROCESS

The development of this guideline followed a multi-stage research process that combined literature review, infrastructure audits, primary research, and community-led insight generation.

A.Literature Review

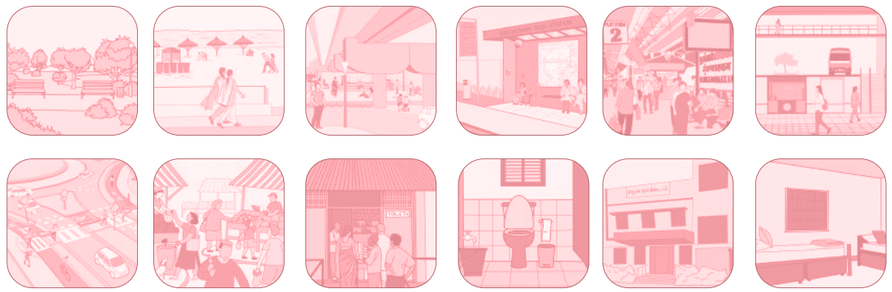
- User Experience of Public Infrastructure
- Gender Responsive Urban Design
- Exisitng Urban Design Guidelines
- Global and Indian Best Practices
- Governance of Public Space

B.Identifying Focus Infrastructure

Chennai, like all large cities, is home to a wide variety of public infrastructure — from beaches and parks to bus stops, markets, community halls, and more. Given the project's resource and time constraints, a tool was developed to narrow down and prioritise 12 key infrastructure typologies from over 50 infrastructures for deeper study. Selection parameters included:

- Specific infrastructure focus and interests of Greater Chennai Corporation (GCC)
- Availability of existing audit data from GCC
- Built and/or managed by GCC
- Presence of existing design guidelines or gaps (from literature)
- Infrastructure with high or potentially high female footfall
- Scope for improvement through design, rather than behaviour change alone

B1.Priority Infrastructure



PARKS & PLAYGROUNDS | BEACHES | SPACES UNDER FLYOVERS | BUS SHELTERS | TRANSIT STATIONS | SUBWAYS & FOOT OVER BRIDGES | STREETS | OPEN AND CLOSED MARKETS | URBAN DELIVERY CENTRES | COMMUNITY HALLS | SHELTERS FOR THE URBAN HOMELESS | PUBLIC TOILETS

C.Field Research Methodology and Study Design

Once the typologies were finalised, the research team undertook the design of a comprehensive field research methodology to capture both spatial and experiential aspects of the selected public infrastructures. This phase included:

- Designing pilot tools for observation, physical audit, and user interaction
- Development of data collection formats and templates that could capture both qualitative and quantitative indicators
- Stratified sampling of sites to ensure geographic, functional, and socio-economic diversity — across North, Central, and South Chennai
- Identification of variables such as user footfall, time of use, seasonality, infrastructure type, and social dynamics
- Designing protocols for ethnographic observation, vox pops, and user behaviour mapping

The research team prioritised participatory, non-intrusive, and inclusive methods to ensure that the user voice remained central to the data collection process.

C1.Field Audits and Tool Development

Following the study design, fieldwork began with the testing and refinement of pilot tools. These tools were used to conduct detailed assessments of 25 sites, using methods such as:

- Physical audits to document spatial features and gaps
- Qualitative audits focused on experience, visibility, and comfort
- Participatory observations of user movement, engagement, and interaction with space.
- Vox pop interviews with diverse users at each location

Audits were performed across different times of day and across geographic contexts to build a layered understanding of user experience.

C2.Community Engagement and Focus Group Discussions

Insights from the audits informed the design of eight focus group discussions (FGDs). These sessions brought together over 80 individuals from a diverse range of communities and user groups, including:

- Young Women and Girls
- Gender Queer, Trans, and Non-Binary Persons
- Women from Urban Poor Settlements
- Migrant Women
- Women from North Chennai (Zones 1 & 2)
- Women with Physical Access Barriers
- Women Staff at Public Spaces
- Women Police Personnel

These discussions revealed how women navigate public infrastructure—shaped by mobility needs, caregiving roles, time use, and access. They shared insights on daily routines, safety, participation in public life, and offered clear, design-focused recommendations grounded in lived experience.

D.From Research to Manual

The manual was developed over a nine-month period between Mar 2024-Nov 2025. It draws on direct user experience research and spatial analyses conducted for this purpose as described here by Design Co:Lab and with inputs from prior and ongoing research from GCC's Gender and Policy Lab. The recommendations are anchored in five foundational pillars:

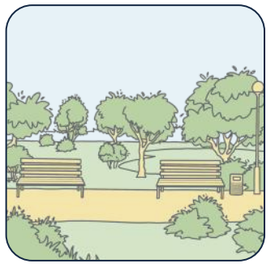
ACCESS | **VISIBILITY** | **SPACE PLANNING** | **COMFORT** | **SAFETY**

Together, these pillars anchor gender-inclusive design as a deliberate, evidence-based practice rooted in lived experience. This manual is a tool for learning and accountability—equipped with checklists to help assess infrastructure through an inclusion lens, and build cities that are not just functional, but fair.

2

DESIGN CHECKLISTS

PARKS AND PLAYGROUNDS



STREETS

BEACHES

OPEN & CLOSED MARKETS

SPACES UNDER FLYOVERS

URBAN DELIVERY CENTRES

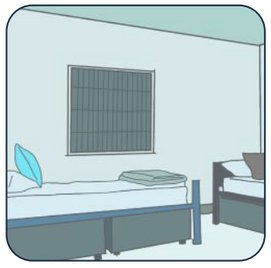
BUS SHELTERS

PUBLIC TOILETS

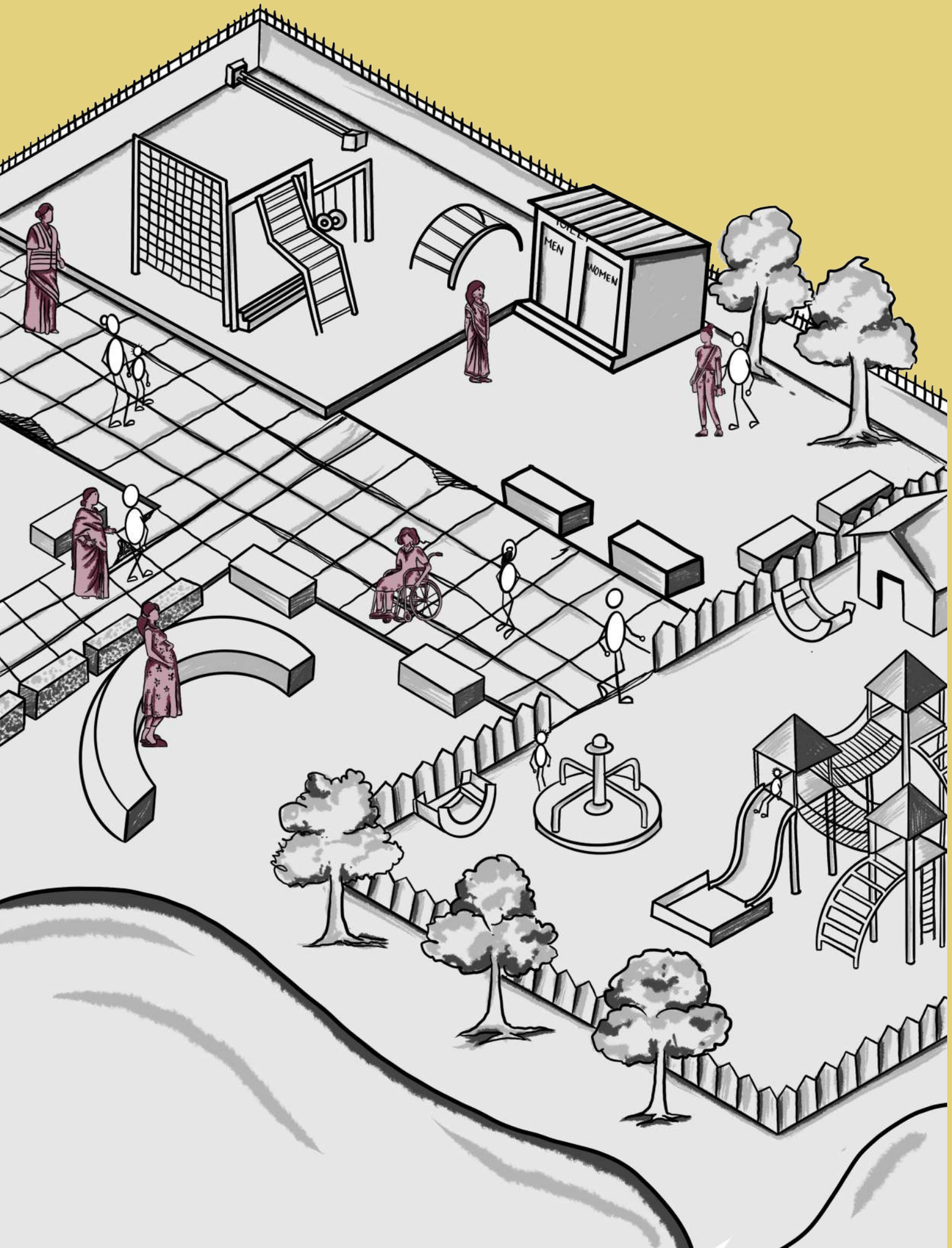
TRANSIT STATIONS

COMMUNITY HALLS

SUBWAYS & FOOT-OVER BRIDGES



SHELTERS FOR THE HOMELESS



01

PARKS AND PLAYGROUNDS

Inclusive & Sensory Public Park
Photo Credit: Playworld

Inclusive & Sensory Public Park in Chennai
Photo Credit: Playworld

Design and Planning Checklist for Parks

INDICATORS	SCORING	1	0.5	0
OPENNESS / VISIBILITY				
	Does the park's boundary wall allow partial or full visibility from the street?	Full visibility	Partial visibility	No visibility
	If a boundary wall exists, is the height lesser than 1.5m?	Yes		No
	Does planting along the park boundary allow clear visibility?	Yes		No
ACCESS TO THE INFRASTRUCTURE				
Pedestrian Access	Is there a minimum 2m walkway or egress (Entry/ Exit) leading to the park?	Yes		No
	Is this footpath continuous and unobstructed? Obstructions include bollards, gate guardrails, drains, trees, etc. that hinder wheelchair movement	Yes		No
	Is the access route to the park well-lit after sunset for ease of visibility and safety?	Yes		No
	Are the footpaths connected to safe, wheelchair-accessible pedestrian crossings at the nearest intersections?	Yes		No
	Are traffic calming measures used near the entrances of the parks? (speed beakers, roundabouts, chicanes, etc)	Yes		No
	If there a level difference between the park premises and the footpath outside the park, is a ramp with handrail provided to enter the park premises?	Yes	Yes, but the ramp slope is very steep.	No
	Is the park entrance wider than 2 metres?	Yes		No
	Are there tactile floor markings to guide visually impaired users to entrances/exits?	Yes	Yes, but some tiles are broken.	No
Vehicular/ Public Transportation	Is public transportation (Bus, Metro Trains, MRTS) available within 500 metres walking distance from the park?	Yes		No
	Are there clear signage & wayfinding indicating public transportation availability, and access points at the park entrance?	Yes	Yes, but not very clear.	No
	Are IPT options like autos, share autos, cycle-sharing facilities, taxis, and ride-sharing services available nearby?	Yes		No
	Are there clear, designated parking areas available for PWD and pregnant women?	Yes		No
	Are there electrical charging points for EV vehicles in the parking area outside the park?	Yes		No

INDICATORS	SCORING	1	0.5	0
ACCESS WITHIN THE INFRASTRUCTURE				
Pedestrian Access	Are there accessibility features like ramps and continuous, unobstructed walkways wider than 2 metres within the park?	Yes	Yes, but they are not consistent or available throughout the park.	No
	Are there tactile tiles for warning and navigation around edges, turns and dangerous areas within the infrastructure?	Yes	Yes, but they are not consistent or available throughout the park.	No
	Are there any braille, tactile maps or auditory signage to guide PwDs to elevators, toilets and other key destinations?	Yes	Yes, but they are not consistent or available throughout the park.	No
	Are staircase treads and riser heights provided as per standards?	Yes		No
	Are railings provided along walking paths for support and safety?	Yes	Yes, but they are not consistent or available throughout the park.	No
	Are there security or staff to help with navigation or user questions?	Yes	Yes, but they are not consistent or available throughout the park.	No
	Atleast one emergency exit route or additional exits/entry points are available	Yes		No
DIVERSITY OF USERS				
	Is there presence of female/ transpersons who are working as staff?	Yes		No
	Is the park used by wheelchair users?	Yes		No
	Is the park used by blind persons?	Yes		No
	Is the park used by transgenders and non-binary person?	Yes		No
	Do you observe presence of women, transpersons and/or children in the park during the daytime? (Tick yes if you see any one user group)	Yes		No
	Do you observe the presence of women, transpersons and/or children in the park after 7PM? (Tick yes if you see any one user group)	Yes		No
	Does the park have play equipment for children?	Yes		No
	Does the park have play equipment and multi-sensory play spaces?	Yes		No

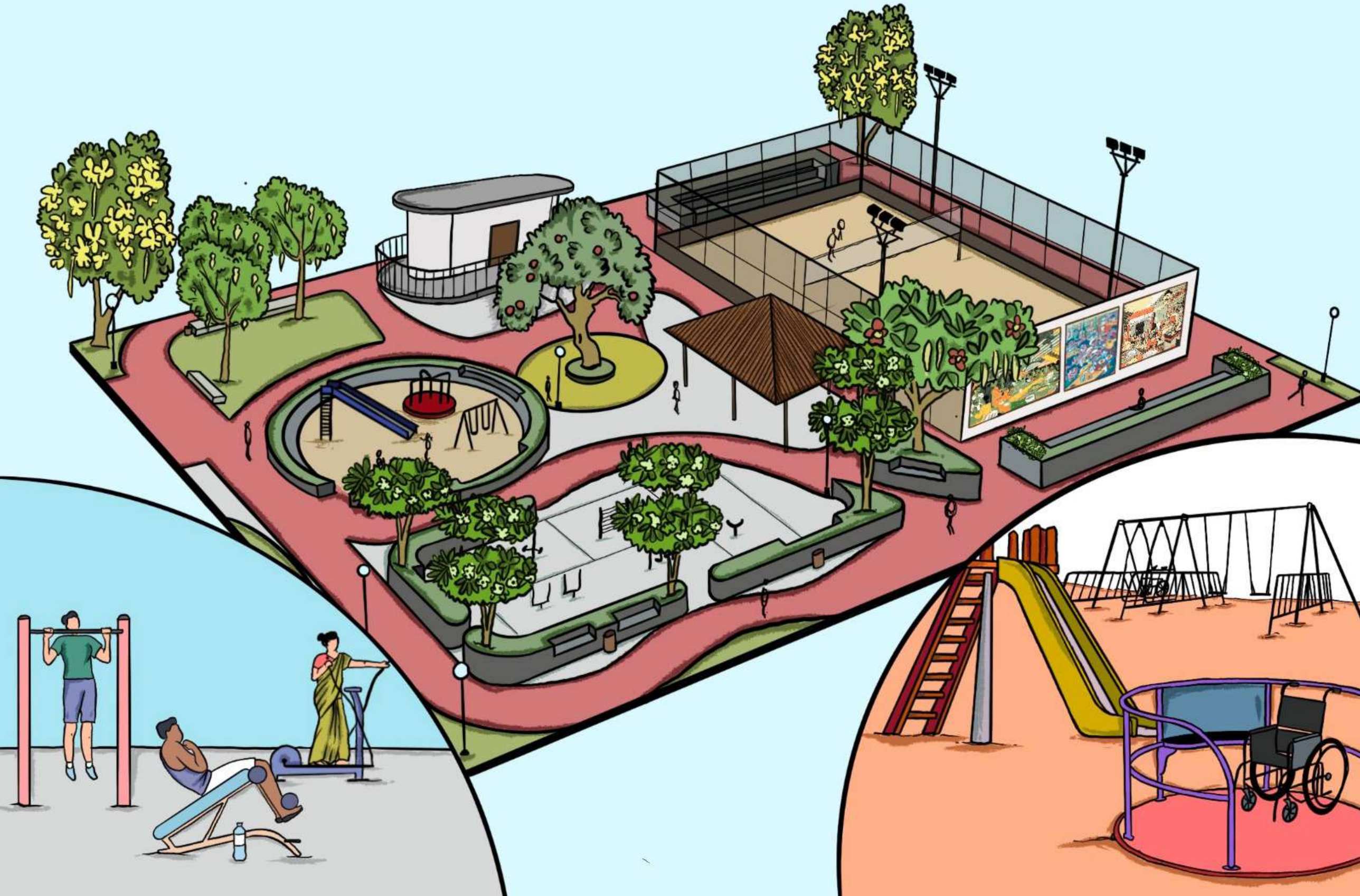
INDICATORS	SCORING	1	0.5	0
COMFORT				
Drinking water	Are drinking water facilities located at a minimum distance of 7.5m. from all play areas inside the park?	Yes	Yes, but not within distance prescribed/ not functional.	No
	Are drinking water taps provided at both adult and child/ wheelchair (0.5-0.55m) heights?	Yes		No
	Is there wheelchair clearance to access the low height drinking water tap?	Yes		No
Seating Provisions	Seating or resting area is provided every 50 metres along the walking path?	Yes	Yes, but they are not consistent or available throughout the park.	No
	Does the seating obstruct the pedestrian walkway?	Yes	Yes, in some cases.	No
	Is the height of the seating provided at 450mm from the floor level?	Yes		No
	Do seats have backrests and armrests for comfort?	Yes	Yes, in some cases.	No
	Does the seating become too hot to sit on during the day?	Yes	Yes, in some cases.	No
	Are there phone charging points near the seating areas?	Yes	Yes, in some cases.	No
Shade	Is there a shade structure/ resting spot for park users to take refuge during rain or excessive heat?	Yes	Yes, but not adequate for the crowd	No
	In the case of large and medium-sized parks, are 70% of primary walkways shaded? And in the case of small parks, are 50% of the walkways shaded?	Yes		No
Walkway Materials	Are walkways made with anti-skid material?	Yes		No
	Are walkways made with permeable or semi-permeable materials?	Yes		No
Waste Disposal	Are there waste bins (including child-sized bins at 0.45-0.5 meters in height) at every 100 meters?	Yes		No
	Are the bins segregated with signage communicating the type of waste?	Yes		No
	Are waste bins adequately managed without overflowing?	Yes	Yes, in some cases.	No
Landscape	A minimum of one tree per 80 sqm. of park area for park sizes larger than 100 sqm. must be ensured. Is this the case here?	Yes		No
	Is plant maintenance ensured with care provisions like staff, water access, and an O&M plan?	Yes		No

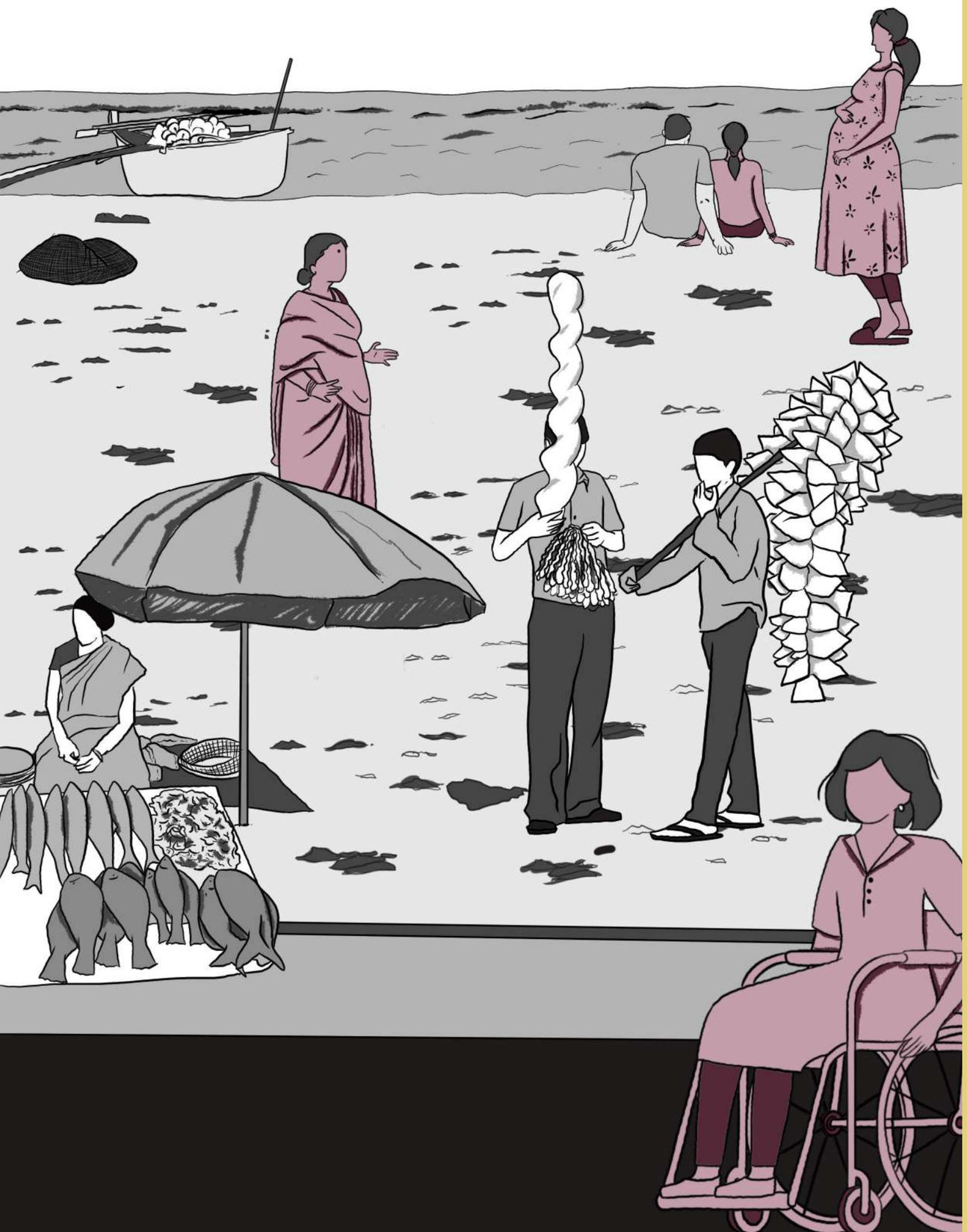
INDICATORS	SCORING	1	0.5	0
Public Art	Is public art present inside the park?	Yes		No
SAFETY				
	Does the park have security personnel? And do they have a dedicated space for keeping their belongings?	Yes	Yes, but no dedicated space for keeping their belongings	No
	Is there adequate visbility to and from active and passive play areas?	Yes	Slightly obstructed view in some areas	No
	Are there CCTV Cameras at every 30-50 meters/ with no blind spots?	Yes	Yes, but has blind spots/ are not functional	No
	Is the park free from vandalism, alcohol bottles, and cigarette butts, ensuring a safe environment for users?	Yes		No
	Is the area free from user groups engaging in activities like gambling, unruly behavior, or intoxication that may cause discomfort to others?	Yes		No
	Is the park located more than 500m walking distance from any liquor sale point?	Yes		No
	Are there emergency call buttons at 300m interval?	Yes		No
LIGHTING				
	Are all pathways, features, buildings, and exits are evenly and adequately lit with a lux level of 10 or more, providing optimal visibility and safety?	Yes	Yes, but not with adequate lighting lux level	No
	Are light fixture heights between 2.4m and 5m, ensuring adequate coverage?	Yes	Yes, but some are not working	No
	Is exterior emergency lighting provided at key points like primary circulation routes, toilets, play and parking areas?	Yes	Yes, but not well-lit	No
	Are treads, risers, and other level differences illuminated along the pathways to avoid tripping and falling?	Yes		No
	Do semi covered spaces/ resting spots have adequate lighting provision?	Yes	Yes, but not well-lit	No

INDICATORS	SCORING	1	0.5	0
SIGNAGE				
	Is the park entrance marked with legible and clear signage?	Yes		No
	Is there informational signage provided? E.g. map layout of the park	Yes	Yes, but it is not located correctly for users.	No
	Is there a Public Address System in the park?	Yes		No
	Are there signages with Helpline numbers or nearest police booth info?	Yes		No
	Is there voice-activated wayfinding systems that provide descriptions of directions or key features in the park, including closing times, emergency routes, regular information,etc.	Yes		No
	Are the signages at a correct reading height for adults and children?	Yes	Yes, but they are not consistent or available throughout the park.	No
	Is there tactile map provided for the map at the entrance?	Yes	Yes, but it is not located correctly for users.	No
	Are all signages multi-lingual?	Yes	Yes, but they are not consistent or available throughout the park.	No
	Is the signage consistent in design throughout the park?	Yes		No

TOTAL PARK SCORE: _____ / 72
TOTAL TOILET SCORE: _____/ 53

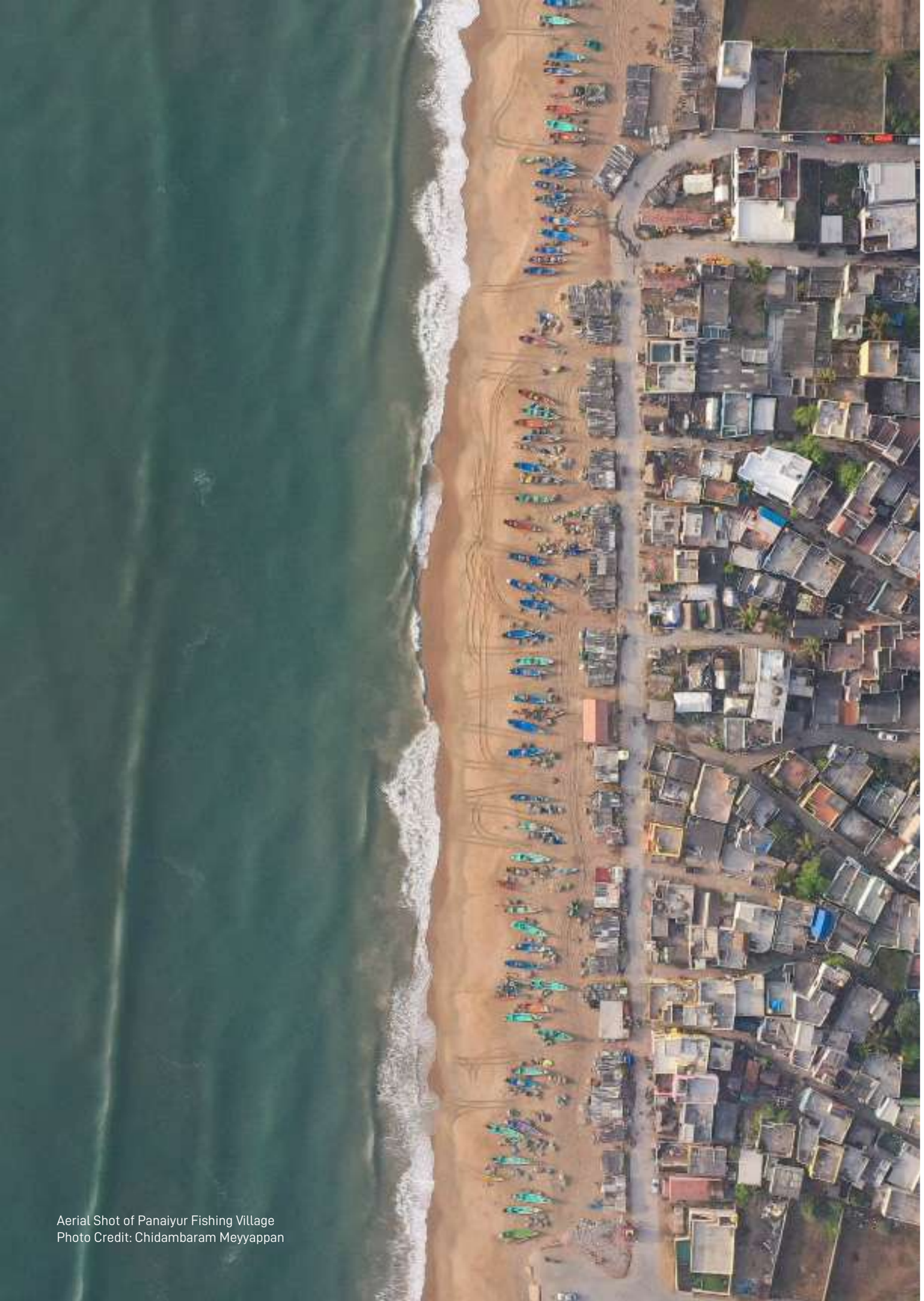
Inclusive & Sensory Public Space in Chennai
Photo Credit: C40 Cities





02

BEACHES



Aerial Shot of Panaiyur Fishing Village
Photo Credit: Chidambaram Meyyappan

Design and Planning Checklist for Beaches

INDICATORS	SCORING	1	0.5	0
OPENNESS / VISIBILITY				
	Can people see clearly across the beach area to help keep it safe?	Full visibility	Partial visibility	No visibility
	Does the boundary follow the beach's natural slope and terrain without harming the environment?	Yes		No
ACCESS TO THE INFRASTRUCTURE				
RECREATIONAL BEACHES				
Pedestrian Access	Is there a continuous footpath at least 2 meters wide along all roads within 500 meters of the beach?	Yes		No
	Does the footpath connect to the beach promenade with safe wheelchair accessible pedestrian crossings and kerb ramps where needed?	Yes		No
	Are there kerb ramps at the drop-off areas?	Yes		No
	Are there tactile tiles/indicators on the ground to guide people to the beach entry points?	Yes		No
	Are the entrance points to the beach promenade clearly marked with readable signs?	Yes		No
	Is the entrance to the beach/promenade clear of obstacles like steep level differences, poorly spaced bollards, gates, guardrails, or drains?	Yes		No
	Are there signs outside and around the beach to help people find their way?	Yes		No
Vehicular / Public Transportation	Is public transportation (Bus, Metro Trains, MRTS) available within 500 metres walking distance from the beach?	Yes		No
	Are there clear signage & wayfinding indicating public transportation availability, and access points at the beach entrance?	Yes	Yes, but not very clear.	No
	Are IPT options like autos, share autos, cycle-sharing facilities, taxis, and ride-sharing services available nearby?	Yes		No
	Are there clear, designated parking areas available for PwD, pregnant women, injured etc?	Yes		No
	Are there electrical charging points for EV vehicles in the parking area outside the park?	Yes		No
FISHING COMMUNITY BEACHES				
Pedestrian Access	Is there a continuous footpath at least 2 meters wide along all roads within 500 meters of the beach?	Yes		No

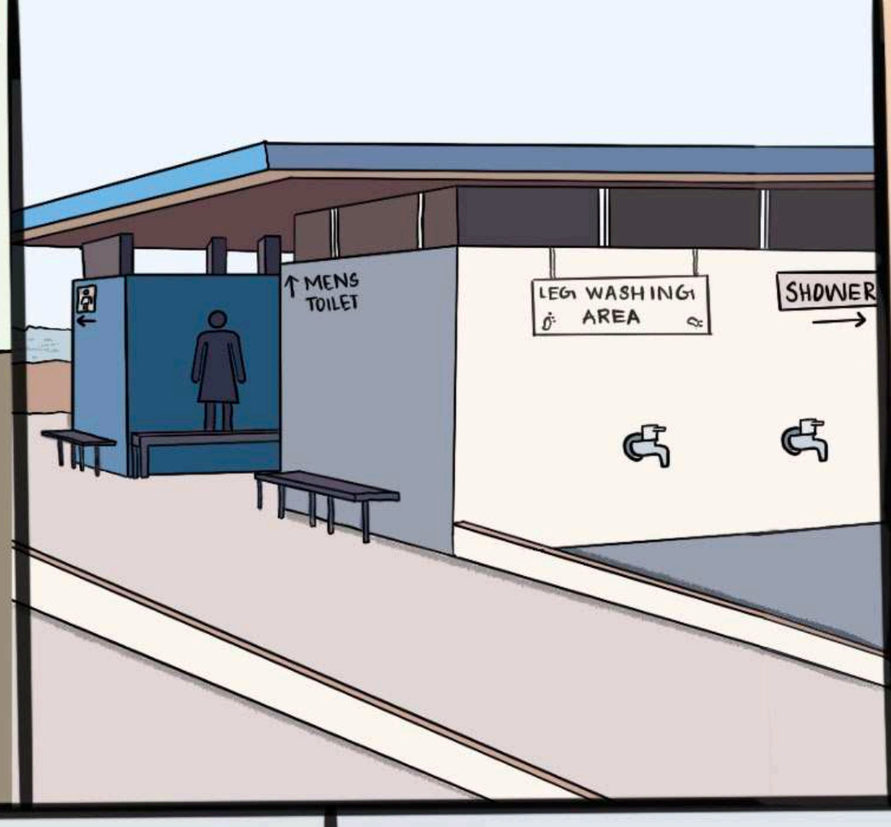
INDICATORS	SCORING	1	0.5	0
Pedestrian Access	Are pedestrian pathways from public transportation nodes to the beach safe, accessible, and barrier-free?	Yes		No
	Are there measures to slow down vehicular speeds (speed humps, signages, roundabouts, chicanes, etc.) at nearby intersections?	Yes		No
Vehicular / Public Transportation	Is the fishing community connected to public transport like buses, metro trains, or MRTS within 1.5 km?	Yes		No
	Are IPT options like autos, share autos, cycle-sharing facilities, taxis, and ride-sharing services available nearby?	Yes		No
ACCESS WITHIN THE INFRASTRUCTURE				
FOR ALL BEACHES				
Pedestrian Access	Is there a clear, unobstructed path for pedestrians from the access road to the beach promenade?	Yes		No
FOR RECREATIONAL BEACHES				
Pedestrian Access	Is the promenade or main walkway at least 4 meters wide?	Yes		No
	Does the beach have at least one accessible route with railings on one side for PWD, strollers, and walkers to reach key areas like the sea, toilets, and drinking water?	Yes		No
	Are other accessible paths, ramps, and walkways wider than 2 meters at the beach?	Yes	Yes, but they are not consistent or available throughout the beach.	No
	Are railings provided along walking paths for support and safety?	Yes		No
	Are all walking areas flat for wheelchair access, with ramps where the ground changes level?	Yes		No
	Is there at least one emergency exit or extra entry/exit points available?	Yes		No
	Are tactile warning tiles installed along beach walking paths?	Yes	Yes, but they are not consistent or available throughout the beach.	No
	Are there any braille, tactile maps or auditory signage to guide PwDs to ramps, toilets, drinking water spouts, and other key destinations?	Yes	Yes, but they are not consistent or available throughout the beach.	No

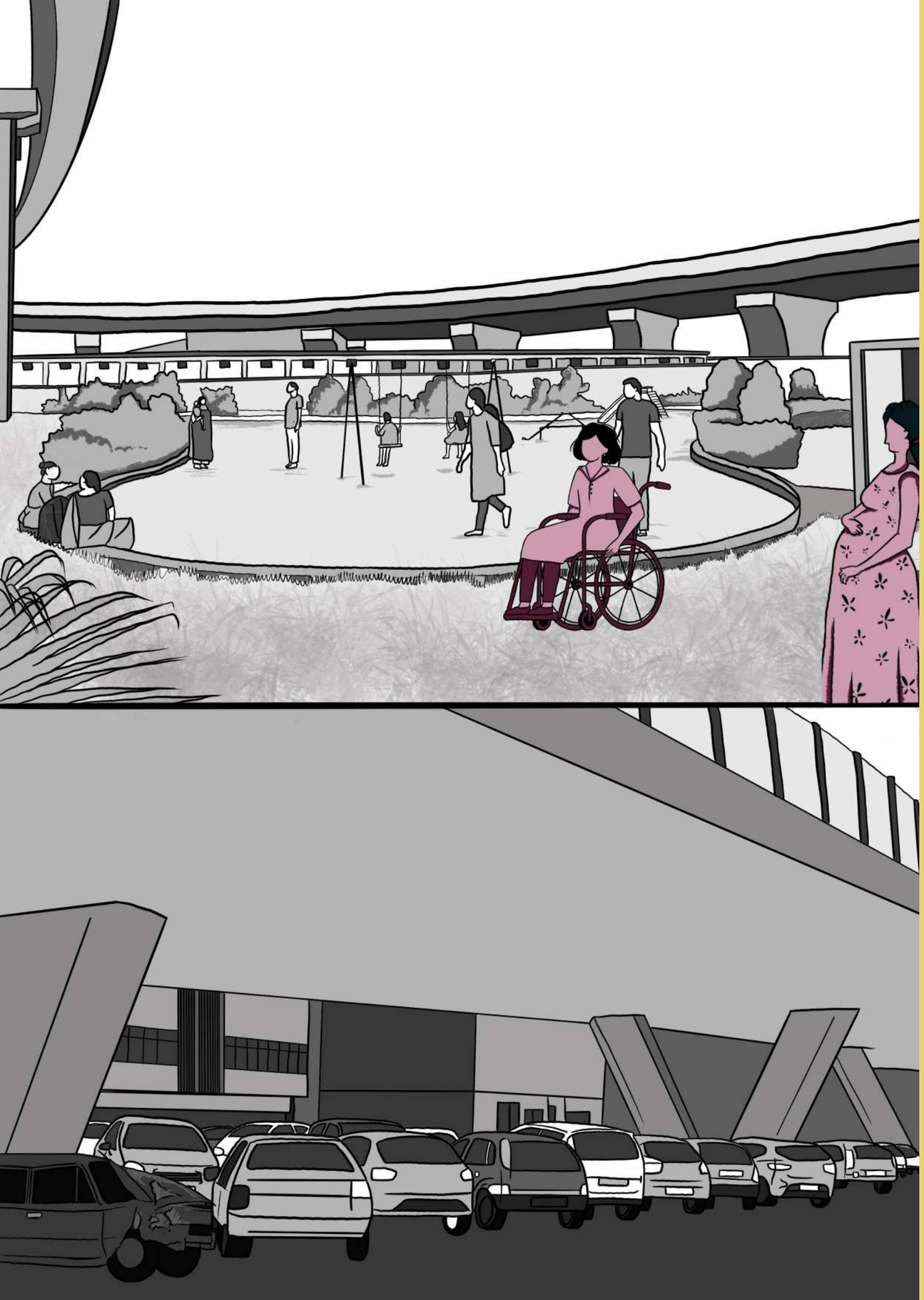
INDICATORS	SCORING	1	0.5	0
VISIBILITY				
	Has the planning process involved community input and stakeholder consultations to balance the needs of tourists and residents?	Yes		No
FOR RECREATIONAL BEACHES				
	Is there presence of female/ transpersons who are working as staff?	Yes		No
	Do wheelchair users use the beach?	Yes		No
	Do blind persons use the beach?	Yes		No
	Do transgenders and non-binary persons use the beach?	Yes		No
	Do you observe presence of women, transpersons and/or children in the infrastructure during the daytime?	Yes		No
	Do you observe the presence of women, transpersons and/or children in the infrastructure after 7PM?	Yes		No
	Are shops, kiosks, and vending zones placed along easy-to-access paths and promenades?	Yes		No
COMFORT				
Drinking water	Are drinking water facilities located at a minimum distance of 7.5m. from all play areas in the beach?	Yes	Yes, but not within distance prescribed/ not functional.	No
	Are drinking water taps provided at both adult and child/ wheelchair (0.5-0.55m) heights?	Yes		No
Shade	Is shading for fishing, shops, and leisure made using natural or removable materials like cloth, dried leaves, or bamboo?	Yes		No
	For Recreational Beaches, Is there a shade structure/ resting spot along walking paths for beach users to take refuge during rain or excessive heat?	Yes	Yes, but not adequate for the crowd	No
Walkway Materials	Are walkways made with anti-skid material?	Yes		No
	Are walkways made with permeable or semi-permeable materials?	Yes		No
Waste Disposal	Are there waste bins (including child-sized bins at 0.45-0.5 meters in height) at every 100 meters?	Yes		No
	Are the bins segregated with signage communicating the type of waste?	Yes		No
	Are waste bins adequately managed without overflowing?	Yes	Yes, in some cases.	No
	For Fishing Community Beaches, Is there a separate disposal point for seller wet and other dry waste?	Yes		No

INDICATORS	SCORING	1	0.5	0
FOR RECREATIONAL BEACHES				
Seating Provisions	Does any seating with leg space reduce the clear width of the walkway?	Yes	Yes, in some cases.	No
	Is the height of the seating provided at 450mm from the floor level?	Yes		No
	Do seats have backrests and armrests for comfort?	Yes	Yes, in some cases.	No
	Does the seating become too hot to sit on during the day?	Yes	Yes, in some cases.	No
	Are there phone charging points near the seating areas?	Yes	Yes, in some cases.	No
	Is there extra seating in busy areas like playgrounds, exercise zones, promenades, and vending areas?	Yes	Yes, in some cases.	No
SAFETY				
Surveillance	Are there CCTV Cameras at every 30-50 meters/ with no blind spots?	Yes	Yes, but has blind spots/ are not functional	No
	For Recreational Beaches, Are lifeguards available to ensure safety and help in emergencies / are there signages to disallow people to enter the water?	Yes		No
Street Vending and Commercial Activities (Only for Recreational Beaches)	Are vendors in busy areas managed to avoid crowding?	Yes		No
	Are vendors in walking and resting areas spread out to keep the space safe and comfortable?	Yes		No
	Are vendors limited in quiet areas like near the water, with no fixed stalls?	Yes		No
	Are there signage with Helpline numbers or nearest police booth info?	Yes		No
Electrical Charging Poles	In Recreational Beaches, Are electrical sockets/charging points provided?	Yes		No
	Are emergency call buttons at 300m intervals?	Yes		No
LIGHTING				
	Are warm-toned lights (3000K) used to avoid disturbing local wildlife?	Yes		No
	Do light fixtures point downward to reduce light pollution?	Yes		No
	Are the right light levels maintained in each area? General Beach areas: 1–5 lux Pathways: 5–15 lux Nesting zones: < 1 lux during nesting season	Yes	Yes, but not with adequate lighting lux level	No
	Along walking paths, are light fixture heights between 2.4m and 5m, ensuring adequate coverage?	Yes	Yes, but some are not working	No

INDICATORS	SCORING	1	0.5	0
	Is exterior emergency lighting provided at key points like primary circulation routes, toilets, play and parking areas?	Yes	Yes, but not well-lit	No
SIGNAGE				
	Are signages provided at all entrances and major circulation paths?	Yes	Yes, but it is not located correctly for users.	No
	Is there informational signage provided? E.g. map layout of the beach, toilets	Yes	Yes, but it is not located correctly for users.	No
	Is there tactile map provided for the map at the beach?	Yes	Yes, but it is not located correctly for users.	No
	Is there a Public Address System in the beach?	Yes		No
	Are there signage with Helpline numbers or nearest police booth info?	Yes		No
	Is there voice-activated wayfinding systems that provide descriptions of directions or key features in the beach, including emergency routes, regular information,etc.	Yes		No
	Are the signages at a correct reading height for adults and children?	Yes	Yes, but they are not consistent or available throughout the beach.	No
	Are all signages multi-lingual?	Yes	Yes, but they are not consistent or available throughout the beach.	No
	Is the signage consistent in design throughout the beach?	Yes		No
TOILETS				
	Is there a toilet along the beach that is easy to reach from the walking path?	Yes		No
FOR RECREATIONAL BEACHES				
	Are there shower, leg washing, and changing room facilities attached to the toilet?	Yes		No
	Are there shower, clothes washing facilities in the toilet?	Yes		No

TOTAL PARK SCORE: _____ / 77
TOTAL TOILET SCORE: _____/ 53


MENS TOILET
LEGS WASHING AREA
SHOWER



03

SPACES BELOW FLYOVERS

Design and Planning Checklist for Spaces below Flyovers

INDICATORS	SCORING	1	0.5	0
OPENNESS / VISIBILITY				
	Are there multiple entry points to the space under the flyover?	Yes		No
	Are fences or walls in open areas under flyovers, where access is allowed, at least 80% see-through? Where access is not allowed, at leat 40% see-through?	Yes	Less than prescribed percentage	No - Completely Solid fence/ wall
	Where access is allowed, is the boundary (fence, wall, plants, etc.) higher than 0.9 meters?	Yes		No
	Are trees, plants, or design features placed in a way that blocks the view of crossings, signs, or infrastructure?	Yes		No
ACCESS TO THE INFRASTRUCTURE				
Pedestrian Access	Can people enter the space below the flyover without steps? If not, is a ramp provided?	Yes		No
	If the space is open to the public, is there a clear sign at the entrance?	Yes		No
	Are all entry points at least 2 meters wide?	Yes		No
	Can people easily see the entrance from the footpath or street?	Yes		No
	Is the entrance to the space clear of obstacles like steep level differences, poorly spaced bollards, gates, guardrails, or drains?	Yes		No
	Is there a clear footpath (at least 2 meters wide) for a 500 meters radius of each entrance, and 4 meters wide on busy streets?	Yes		No
	Does the footpath connect smoothly to the entrances with safe crossings and kerb ramps where needed?	Yes		No
	Are there tactile tiles/indicators on the ground to guide people to the entry points?	Yes		No
	Is there clear signage outside and near the entry points?	Yes		No
	Do parking spots for people with disabilities or pregnant persons connect to a safe walking path leading to the entry?	Yes		No
Vehicular / Public Transportation for Active and Semi-active use spaces	Is public transportation (Bus, Metro Trains, MRTS) available within 1km walking distance from the entry points of the space?	Yes		No
	Is there clear signage showing nearby transport options like buses, metro, autos, or taxis?	Yes	Yes, but not very clear.	No
	Are IPT options like autos, share autos, cycle-sharing facilities, taxis, and ride-sharing services available nearby?	Yes		No
Private Transporation - Off-street Parking for Active and Semi-active use spaces	Is cycle and other vehicular parking available?	Yes		No
	Are the drop-off and pick-up locations close to entry points?	Yes		No
	Is there clear signage for parking spots reserved for persons with disabilities and pregnant persons near the main entrance?	Yes		No
	Are there clear, designated parking areas available for PwD, pregnant women, injured etc?	Yes		No
	Are there electrical charging points for EV vehicles in the parking area outside the park?	Yes		No
ACCESS WITHIN THE INFRASTRUCTURE				
Pedestrian Access	Are railings provided along walking paths for support and safety?	Yes		No
	Are all walking areas flat for wheelchair access, with ramps where the ground changes level?	Yes		No
	Are tactile tiles provided for both warning and navigation?	Yes	Yes, but they are not consistent or available throughout the space.	No
VISIBILITY				
Only for spaces designed for active / semi-active use	Does the Subway/FOB include at least three of the following features: 1. Commercial facilities like coffee shops, kiosks, or hawker spaces? 2. Spaces for busking, entertainment, or activities? 3. Artwork or landscape (with provisions for maintenance) for visual appeal?	Yes		No
COMFORT				
Seating Provisions	Is seating available every 50–100 meters?	Yes		No
	Does any seating with leg space reduce the minimum clear width of the walkway?	Yes		No
	Is the height of the seating provided at 450mm from the floor level?	Yes		No

INDICATORS	SCORING	1	0.5	0
	Do seats have backrests and armrests for comfort?	Yes	Yes, in some cases.	No
	Does the seating become too hot to sit on during the day?	Yes	Yes, in some cases.	No
Drinking water	Is drinking water available next to the toilet or at least once every 100 meters?	Yes	Yes, but not within distance prescribed/ not functional.	No
	Are drinking water taps provided at both adult and child/ wheelchair (0.5-0.55m) heights?	Yes		No
Walkway Materials	Are walkways made with anti-skid material?	Yes		No
	Are walkways made with permeable or semi-permeable materials?	Yes		No
Waste Disposal	Are there waste bins (including child-sized bins at 0.45-0.5 meters in height) at every 100 meters?	Yes		No
	Are the bins segregated with signage communicating the type of waste?	Yes		No
	Are waste bins adequately managed without overflowing?	Yes	Yes, in some cases.	No
Landscape	Is plant maintenance ensured with care provisions like staff, water access, and an O&M plan?	Yes		No
SAFETY				
Surveillance	Are there CCTV Cameras installed along the length of the space with no blind spots?	Yes	Yes, but has blind spots/ are not functional	No
	Are there signage with Helpline numbers or nearest police booth info?	Yes		No
Electrical Charging Poles	Are electrical sockets/charging points provided?	Yes		No
	Are emergency call buttons installed at 300m intervals?	Yes		No
LIGHTING				
	Are light levels maintained between 20–50 lux near highways and 10–30 lux near major roads?	Yes	Yes, but not with adequate lighting lux level	No
	Is lighting spaced at equal intervals along the length of the infrastructure, considering height, type, and luminance of the lights?	Yes		No
	Is exterior emergency lighting provided at key points like primary circulation routes?	Yes		No

INDICATORS	SCORING	1	0.5	0
SIGNAGE				
	Are signages provided at road-level crossings and entrances - showing maps, locality details, pedestrian directions, and pick-up/drop-off points clearly visible from the street?	Yes	Yes, but it is not located correctly for users.	No
	Are there signage with Helpline numbers or nearest police booth info?	Yes		No
	Are the signages at a correct reading height for adults and children?	Yes	Yes, but they are not consistent or available throughout the space.	No
	Are all signages multi-lingual?	Yes	Yes, but they are not consistent or available throughout the space.	No
TOILETS				
	Is a toilet provided under the flyover if the nearest public toilet is over 1km away?	Yes		No

TOTAL SPACE BELOW FLYOVER SCORE: _____ / 51
TOTAL TOILET SCORE: _____/ 53

04

BUS SHELTERS

Design Checklist for Bus Shelters

INDICATORS	SCORING	1	0.5	0
LOCATION				
	Can people clearly see the bus coming, without trees, boards, turns, or parked vehicles blocking the view?	Yes		No
	Is the bus stop placed before the intersection (near side) or after it (far side)?	Far side	Neither. It is a mid-block bus stop.	Near side
	Is the bus stop located on a high footfall street?	Yes		No
ACCESS				
	Are mandatory unobstructed footpaths (minimum 2m wide) provided within a 500m walking distance of the bus shelter?	Yes		No
	If located on a high footfall street, is the foot-path width at least 4 metres?	Yes		No
	What is the condition of this footpath? Poor condition: Completely broken or does not exist Moderate condition: Partially broken, wheel-chair can move without difficulty Good condition: Wheelchair can easily move	Good	Moderate	Poor
	Is there at least 1 meter of space between the shelter and the road edge to help people get on and off the bus easily?	Yes		No
	Is the entire bus shelter platform at 300mm from the road for easy access to low-floor buses? Or is there a separate 900mm wide platform with a ramp and double-height hand-rails for easier boarding for PWD?	Yes		No
	Are there colour-contrasted tactile warning strips to provide access to the bus shelter and level boarding platform?	Yes		No
	Is there less than 2 meters of space behind the bus shelter?	Yes		No
	Is parking not allowed within 15 meters before or after the bus stop?	Yes		No
	Are Kassel kerbs provided for buses to stop close and parallel to the footpath?	Yes		No
DESIGN				
	Is the Bus shelter of a minimum dimension of 10m(L) x 1.5m (W) x 2.2m (H)?	Yes		No
	Is there proper provision for rain water run-off from the roof of the bus shelter?	Yes		No
	Is at least 60% of each side of the bus stop see-through (transparent)?	Yes	Between 30-60% see-through	No
COMFORT				
	Is seating provided at 450mm from floor level?	Yes		No
	Is there space for at least one wheelchair user to wait inside the bus shelter?	Yes		No
	Are leaning rails provided at 1150mm from floor level?	Yes		No
	Are there segregated and accessible waste disposal bins (including child-sized bins at 0.45-0.5 meters height) provided?	Yes		No
INFORMATION				
	Is there Real time arrival information, Service Alerts?	Yes		No
	Is there Audio Information Service for bus arriv-als?	Yes		No
	Are bus route numbers mentioned clearly in the bus shelter?	Yes		No
	Are the bus numbers provided in Braille?	Yes		No
	Is information about routes, timetables, fares, tickets, and local maps, available in multiple languages?	Yes		No
	Are there signages with Helpline numbers or nearest police booth info?	Yes		No
	Is the information board lit and clearly readable at all times of the day and night?	Yes		No
SAFETY				
	Is the bus shelter equipped with CCTV Cameras?	Yes		No
	Are there emergency call buttons at the bus shelter?	Yes		No
	Are there electrical sockets?	Yes		No
LIGHTING				
	Is the minimum lighting level of 50 lux main-tained?	Yes		No
	Is the light fixture housed in protective casing to protect from vandalism?	Yes		No
SIGNAGE				
	Are bus stop poles and street signs (like 'No Parking') installed at the shelter?	Yes		No

TOTAL BUS SHELTER SCORE: _____ / 35

BROADWAY BUS STOP

BUS STOP

TIMING. CHART.

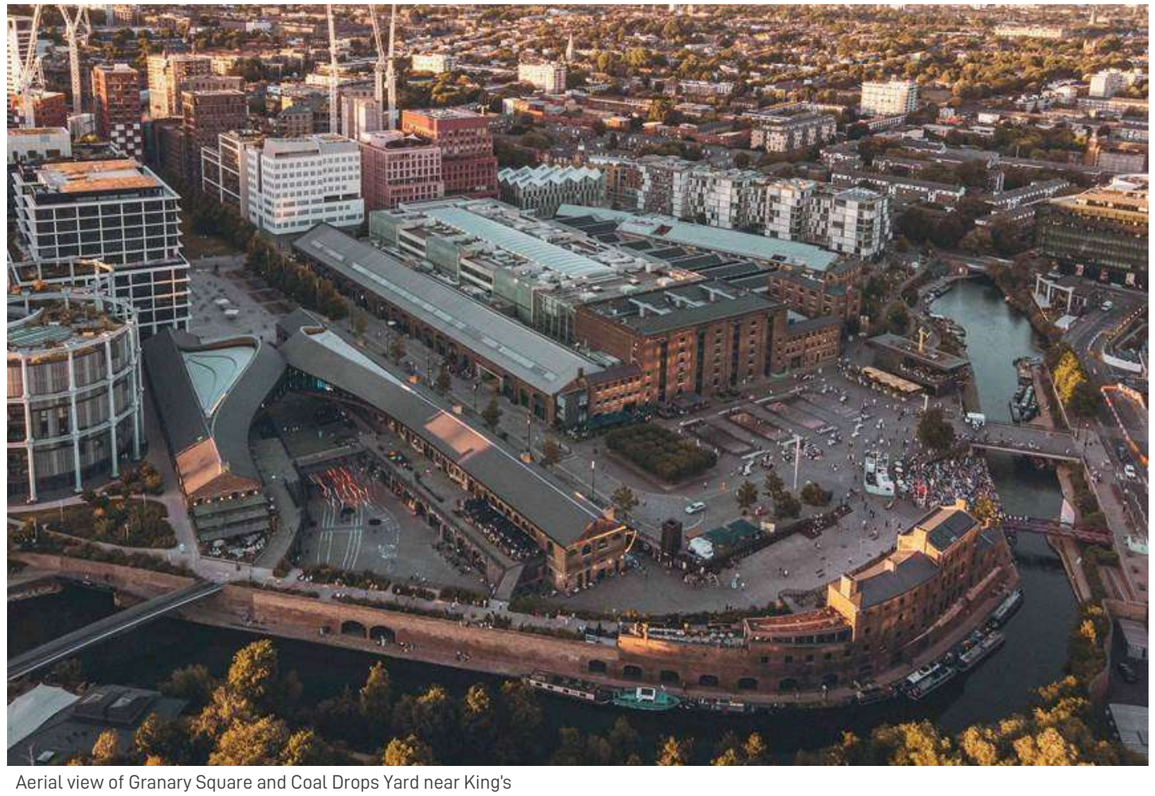
1	ORD	1	TONDIARPET	TRIPLICANE	1	46	4
	NSCBT	1	ENNORE	THIRUVANMIYUR	1	44	42
	NSCBT	1	THIRUVOTRIYUR	THIRUVANMIYUR	1	74	42
	LSS	1	THIRUVOTRIYUR	THIRUVANMIYUR	37	44	4.5
	EXP	1	THIRUVOTRIYUR	THIRUVANMIYUR	2	74	4
2	ORD	8	TOLLGATE	BESANT NAGAR	2	45	4
	LSS	9	TOLLGATE	BESANT NAGAR	8	44	4.5
3	ORD	9	PARRYS	ADAYAR D.S.	3	55	4.5
4	ORD	9	T.NAGAR B.S.	PARRYS	3	45	4.5
5	ORD	10	PARRYS	T.NAGAR B.S.	3	55	4.5
6	ORD	11	PARRYS	T.NAGAR B.S.	3	45	4
	GS	11	PARRYS	T.NAGAR B.S.	3	45	4
7	ORD	12	T.NAGAR B.S.	VIVEKANANDA HOUSE	4	44	3.5
8	ORD	13	T.NAGAR B.S.	TRIPLICANE	4	44	4.5
9	ORD	13	ANNANAGAR B.S.	PARRYS	2	44	4
10	ORD	17	PARRYS	VADAPALANI D.S.	5	44	4.5
11	ORD	18	PARRYS	SAIDAPET	3	45	4
12	ORD	19	T.NAGAR B.S.	KAVALAMMA	3	74	4

13	ORD	20	VELLIVAKKAM	PARRYS	12	45	4
14	ORD	21	MANDAVELI	PARRYS	13	38	4
15	ORD	22	AYANAVARAM B.S.	ANNA SQUARE	5	45	4
16	ORD	25	VADAPALANI B.S.	TRIPLICANE	2	56	4.5
17	ORD	26	S.I.E.	T.NAGAR B.S.	2	68	4.5
18	ORD	27	ANNANAGAR B.S.	ANNA SQUARE	1	48	4.5
19	ORD	28	THIRUVOTRIYUR	ENNORE B.S.	7	69	4.5
	GS	28	THIRUVOTRIYUR	ENNORE B.S.	1	69	4.5
20	ORD	29	PERIYAR NAGAR	Q.M.ARTS COLLEGE	6	78	4.5
21	ORD	31	ROYAPURAM (R.M.T.)	DR.AMBEDKAR BRIDGE	8	58	4
22	LSS	32	VALLALAR NAGAR	VIVEKANANDA HOUSE	8	48	3.5
23	ORD	33	M.R.D.NAGAR	HIGH COURT	8	48	3
	GS	33	M.R.D.NAGAR	HIGH COURT	1	48	3
24	ORD	34	AMBATTUR ESTATE	THIRUVOTRIYUR	2	85	4
	LSS	34	THIRUVOTRIYUR	AMBATTUR ESTATE	8	75	4.5

05

TRANSIT STATIONS

Nehru Place Metro Station A nodal city hub
Photo Credit: Getty Images



Aerial view of Granary Square and Coal Drops Yard near King's Cross Station in London, England.
Photo Credit: Getty Images, Wirestock

Design Checklist for Transit Stations

INDICATORS	SCORING	1	0.5	0
OPENNESS / VISIBILITY				
	Does the station's boundary wall allow partial or full visibility from the street?	Full visibility	Partial visibility	No visibility
	If a boundary wall exists, is the height lesser than 1.5m?	Yes		No
	Is parking along the building/road edge obstructing direct access to the station?	Yes		No
ACCESS TO THE INFRASTRUCTURE				
Pedestrian Access	Are mandatory unobstructed footpaths (minimum 2m wide) provided within a 500m walking distance of the transit station?	Yes		No
	Along all edges of the transit station, is the footpath width at least 4 metres?	Yes		No
	What is the condition of this footpath? Poor condition: Completely broken or does not exist Moderate condition: Partially broken, wheelchair can move without difficulty Good condition: Wheelchair can easily move	Good	Moderate	Poor
	Is this footpath continuous and unobstructed? Obstructions include bollards, gate guardrails, drains, trees, etc. that hinder wheelchair movement	Yes		No
	Is the access route to the station well-lit after sunset for ease of visibility and safety?	Yes		No
	Are the footpaths connected to safe, wheelchair-accessible pedestrian crossings at the nearest intersections?	Yes		No
	If the main intersection is more than 50 meters away, is a mid-block crosswalk or raised intersection provided near the station entrance?	Yes		No
	Are traffic calming measures used near the station entrance? (speed beakers, roundabouts, chicanes, etc)	Yes		No
	Are there tactile floor markings to guide visually impaired users to entrances/exits?	Yes	Yes, but some tiles are broken.	No
	If there a level difference between the market premises and the footpath outside the station, is a ramp with handrail provided to enter the station premises?	Yes	Yes, but the ramp slope is very steep.	No
	Is the station pedestrian entrance atleast 2 metres wide?	Yes		No

INDICATORS	SCORING	1	0.5	0
Vehicular / Public Transportation	Can a person using a wheelchair easily move between transit modes like buses, taxis, or metro, with clear signs showing the way?	Yes		No
	Is there a designated drop-off and pick-up spot for autos and other IPTs within 50 meters of the station entrance?	Yes		No
	Is parking available as per local building norms?	Yes		No
	Are there clear, designated parking areas available for PWD and pregnant women?	Yes		No
	Are there electrical charging points for EV vehicles in the parking area?	Yes		No
ACCESS WITHIN THE INFRASTRUCTURE				
Pedestrian Access	Is there a clear walking path from the gate to the station building without vehicular conflicts?	Yes		No
	Is the transit station floor surface non-slip?	Yes		No
	Are handrails provided along the edges of the station corridor?	Yes		No
	Are tactile tiles installed for warning and guidance?	Yes		No
	Are slopes inside designed to avoid water stagnation?	Yes		No
	Are all interior station areas flat, with ramps where there are level changes?	Yes		No
	Are all stair steps at least 300mm deep?	Yes		No
	Are all stair risers 150mm high?	Yes		No
	Do the lift controls have accessible features like foot-operated buttons?	Yes		No
	Are ramps or lifts provided next to stairs in elevated or underground stations, as per Harmonised Guidelines, 2016?	Yes		No
	Are station corridors at least 4.5 meters wide?	Yes		No
	Is a moving walkway (horizontal movement belt) provided if the distance from the station entrance to the platform is more than 300 meters?	Yes		No
DESIGN				
Overall Site	Does the station have multi-utility spaces like coworking spaces, 24/7 shops, or daycare?	Yes		No
	Are there multiple clear entry and exit points to manage crowd flow?	Yes		No
	Is the site layout planned so that pedestrians and vehicles can move without crossing paths or with conflicts?	Yes		No
Design	If any corridor within the station is 50–100 meters long, is the width at least one-tenth of the length?	Yes		No
	(If applicable) Are there multiple fare gate entry points, with at least more than one gate measuring 1.0 to 1.2 m wide?	Yes		No
	Are ticket counters available both outside and inside the station building?	Yes		No

INDICATORS	SCORING	1	0.5	0
Amenities	Are waiting and queuing areas (kiosks, ticket counters, ATMs) well-lit, visible, and accessible for wheelchair users?	Yes		No
	Are shops and kiosks placed in high-traffic areas for visibility and natural surveillance, and do they remain open until service hours end?	Yes	Yes, but not open until last bus/train service	No
	Are toilets and other user facilities located near main corridors and entry points?	Yes		No
	Are amenities like luggage lockers, daycare, a pharmacy, and first aid available?	Yes		No
COMFORT				
Entrance Roof	Does the entrance roof fully cover the width and length of stairways, escalators, ramps, and lifts, extending at least 300mm beyond?	Yes		No
Seating	Is seating provided every 15-30 meters?	Yes		No
	Is each seating section at least 1.5 meters long?	Yes		No
	Does the seating stay clear of minimum walking paths width?	Yes		No
	Is the height of the seating provided at 450mm from the floor level?	Yes		No
	Is the seat width at least 450mm?	Yes		No
	Is at least 10% of all seating equipped with backrests, armrests, and adequate spacing?	Yes		No
Commercial Kiosks / Vending Machines/ Retail Stores	Do kiosks/commercial outlets avoid obstructing pedestrian flow?	Yes		No
	Is the kiosk/commercial outlet layout compact without compromising visibility?	Yes		No
	Are kiosks positioned near entrances, exits, and amenities?	Yes		No
Drinking Water	Are Drinking water facilities provided adjacent to every restroom facility or atleast one in every 30-50m.	Yes	Yes, but not within distance prescribed/ not functional.	No
	Are drinking water taps provided at both adult and child/ wheelchair (0.5-0.55m) heights?	Yes		No
	Is there wheelchair clearance to access the low height drinking water tap?	Yes		No
Waste Disposal	Are there waste bins (including child-sized bins at 0.45-0.5 meters in height) at every 100 meters?	Yes		No
	Are the bins segregated with signage communicating the type of waste?	Yes		No
	Are waste bins adequately managed without overflowing?	Yes	Yes, in some cases.	No

INDICATORS	SCORING	1	0.5	0
INFORMATION				
	Is there Real time arrival information, Service Alerts?	Yes		No
	Is there Audio Information Service for arrival and departures?	Yes		No
	Are the station provided in Braille?	Yes		No
	Is there information on route time table?	Yes		No
	Is the information board lit and clearly readable at all times of the day and night?	Yes		No
SAFETY				
Surveillance	Does the station have security personnel? And do they have a dedicated space for keeping their belongings?	Yes	Yes, but no dedicated space for keeping their belongings	No
	Is the station equipped with CCTV camera covering all interior and exterior spaces and avoiding blind spots?	Yes		No
	Are there emergency call buttons at the station?	Yes		No
	Are there electrical sockets for people to charge phones?	Yes		No
	Is there a two way speaker system for verbal communication at information kiosks?	Yes		No
LIGHTING				
	Is the average lighting level at least 50 lux in outdoor areas around the station?	Yes		No
	Are underground or enclosed spaces lit with 100–300 lux?	Yes		No
	Are circulation areas and corridors lit with 150–300 lux?	Yes		No
	Are platforms, ticketing zones, and waiting areas lit with 300–500 lux?	Yes		No
	Is the average lux level on all pedestrian bridges 20, if any?	Yes		No
	Is there adequate foot-level lighting in addition to the space lighting?	Yes		No
	Are high-lumen floodlights used in parking and other exterior areas?	Yes		No
	Is the light fixture housed in protective casing to protect from vandalism?	Yes		No
	Is emergency security lighting installed at all entrances and main access routes inside and outside the station?	Yes		No
	Does the light temperature mimic daylight conditions (around 4000K)?	Yes		No
SIGNAGE				
	Are signages incorporated at the infrastructure level with maps, transportation nodes, points of interest, and locality descriptions?	Yes		No

INDICATORS	SCORING	1	0.5	0
	Is there a Public Address System in the station?	Yes		No
	Are there signages with Helpline numbers or nearest police booth info?	Yes		No
	Is there voice-activated wayfinding systems that provide descriptions of directions or key features in the station including service times, emergency routes, regular information,etc.	Yes		No
	Are the signages at a correct reading height for adults and children?	Yes	Yes, but they are not consistent or available throughout the station.	No
	Is there tactile map provided for the map at the entrance?	Yes	Yes, but it is not located correctly for users.	No
	Are all signages multi-lingual?	Yes	Yes, but they are not consistent or available throughout the station.	No
	Is the signage consistent in design and/ or as per standards?	Yes		No

TOTAL TRANSIT STATION SCORE: _____ / 85
TOTAL TOILET SCORE: _____/ 53

Ladies
Waiting room
DRINKING WATER
TICKET VENDING MACHINE
TRAINS→
TOILET
FEEDING ROOM
LIFT
←Trains

06

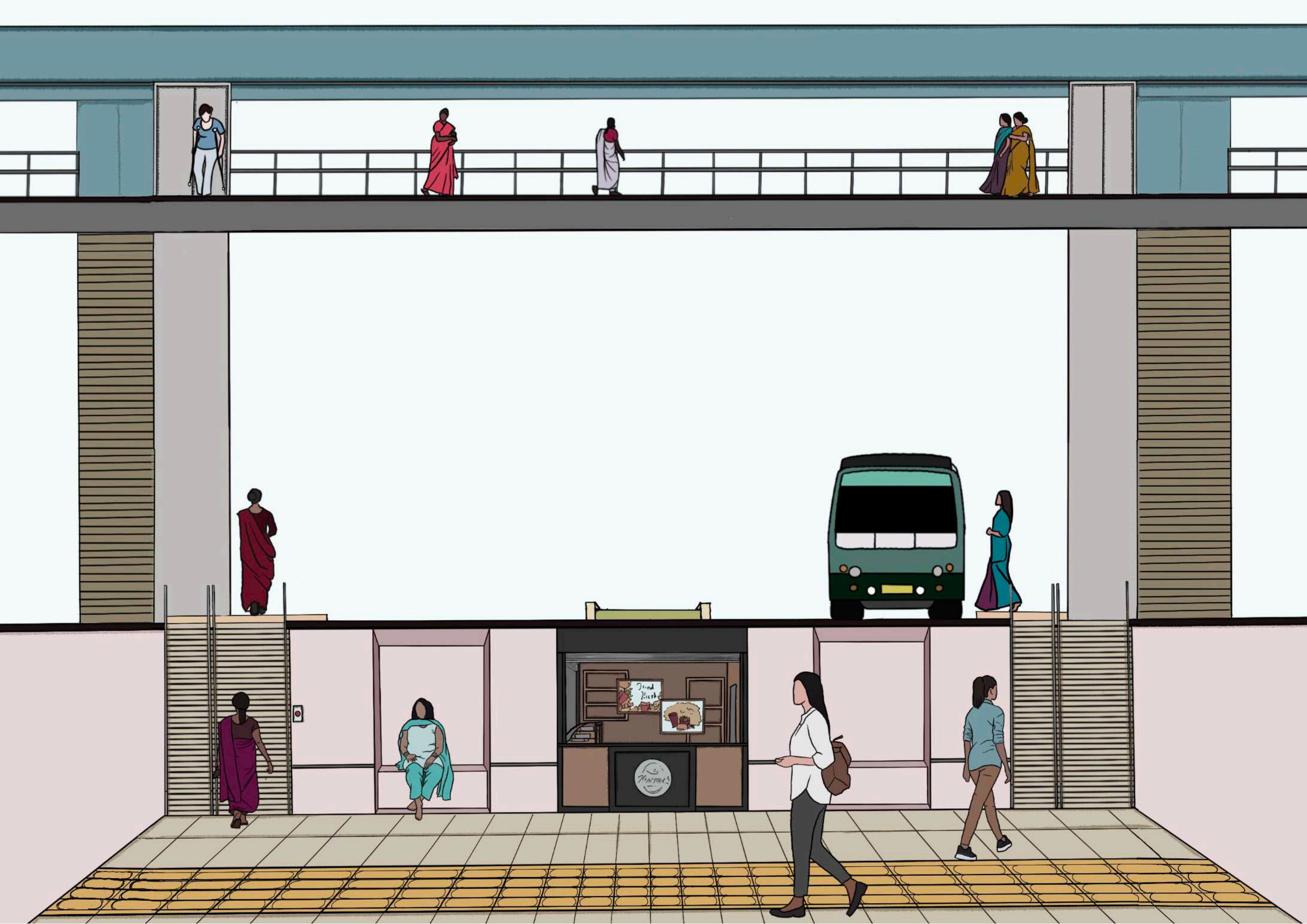
SUBWAYS & FOOT OVER BRIDGES

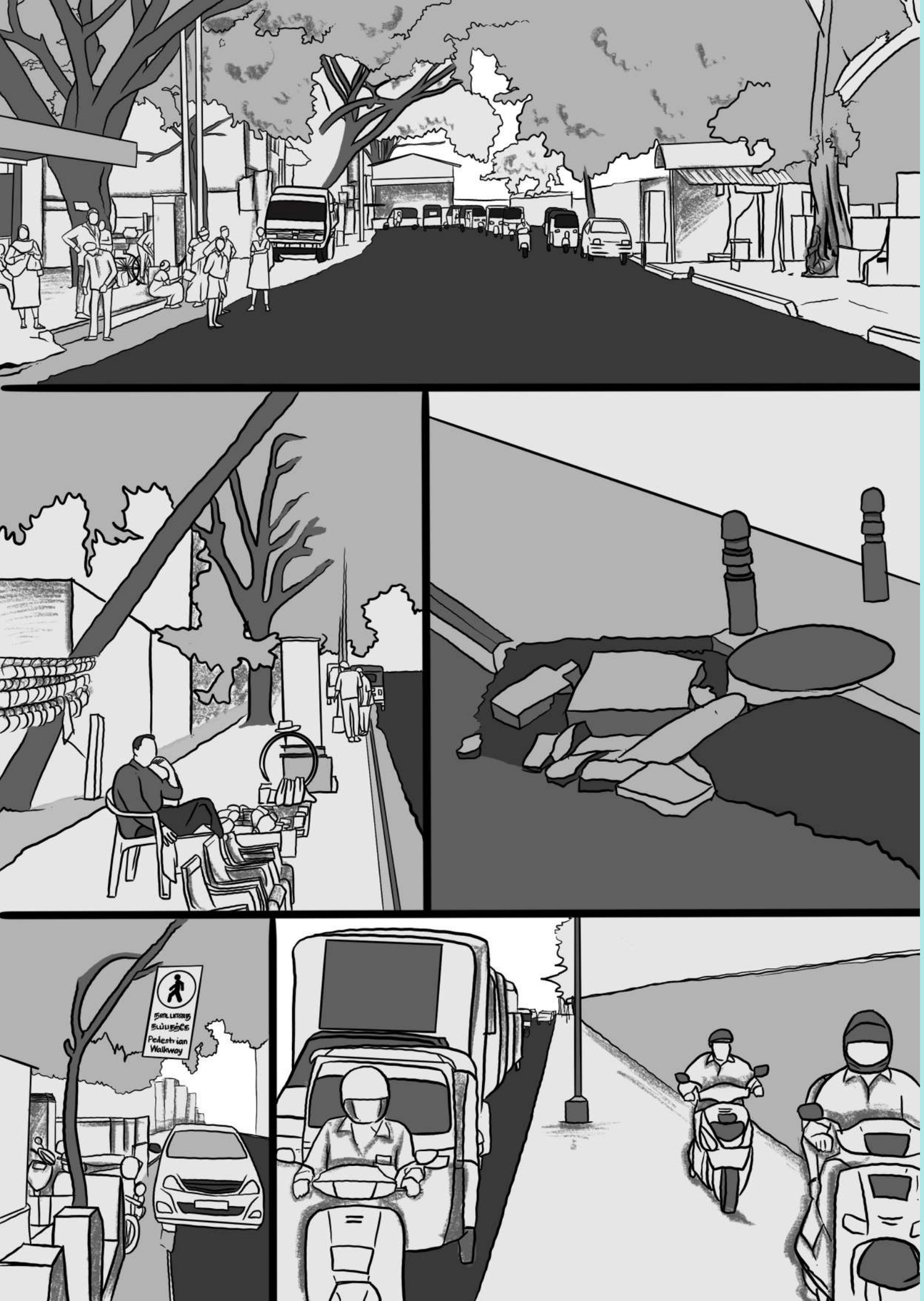
Design Checklist for Subways and Foot Over Bridges

INDICATORS	SCORING	1	0.5	0
OPENNESS / VISIBILITY				
	Is at least 70% of the ground floor around the Subway/FOB entrance open or see-through to support street activity?	Full visibility	Partial visibility. Less than 70%	No visibility
	Does the Subway/FOB entrance block the footpath and make it narrower than 2 meters?	Yes		No
	Is the subway/FOB entrance far from where most people naturally want to cross?	Yes		No
	Are any entrances hidden or in areas without people around to watch?	Yes		No
	Is the Subway/FOB entrance area fully closed, partly open, or see-through?	Yes		No
	Do people walking towards the stairs or ramps face traffic coming toward them?	Yes		No
	Are the sides of the Subway/FOB entrance fully closed, partly open, or see-through?	Yes		No
ACCESS TO THE INFRASTRUCTURE				
Pedestrian Access	Is there a lift or ramp for persons on wheelchair to access the subway/FOB?	Yes		No
	Is there enough open space outside the subway/FOB for people to stand, wait, or move easily?	Yes		No
	Does the stairway and ramp have handrails on both sides?	Yes		No
	Is there a roof or cover over the ramps, stairs, and escalators at the entrance?	Yes		No
	Is there enough street lighting along the way to the subway/FOB entrance?	Yes		No
	Is the entrance free from obstacles like plants, bollards, guardrails, or drains?	Yes		No
	Is the footpath around the Subway/FOB entrance smooth and easy for a wheelchair to use?	Yes		No
	Are kerb ramps available at nearby intersections and drop-off points?	Yes		No
	Are tactile tiles or markers on the footpath to guide people to the subway/FOB?	Yes		No
	Is there clear signage outside and around the subway/FOB to help people find their way?	Yes		No
ACCESS WITHIN THE INFRASTRUCTURE				
	Is the subway/FOB floor surface non-slip?	Yes		No
	Are handrails provided along the edges of the subway/FOB?	Yes		No
	Are tactile tiles installed for warning and guidance?	Yes		No
	Are slopes inside designed to avoid water stagnation?	Yes		No
	Are all interior subway/FOB areas flat, with ramps where there are level changes?	Yes		No
	Are all stair steps at least 300mm deep?	Yes		No
	Are all stair risers 150mm high?	Yes		No
	Do the lift controls have accessible features like foot-operated buttons?	Yes		No
FOR SUBWAYS				
	Is the subway at least 4.5 meters wide? Or, if it's 50–100 meters long, is the width at least one-tenth of the length?	Yes		No
	Is the height of the subway at least 3 meters from the finished floor level (FFL)?	Yes		No
FOR FOBs				
	Is the pedestrian bridge at least 1.8 meters wide?	Yes		No
	If cycling is allowed, are there separate lanes for cyclists, with the bridge being at least 3.0 meters wide?	Yes		No
	Is the height of the pedestrian bridge at least 2.5 meters from the finished floor level (FFL)?	Yes		No
VISIBILITY				
Programming and Activation	Does the Subway/FOB include at least three of the following features: 1. Direct connection to adjacent buildings for easy access? 2. Commercial facilities like coffee shops, kiosks, or hawker spaces? 3. Connection to parking facilities? 4. Spaces for busking, entertainment, or activities? 5. Artwork or decorative elements for visual appeal? 6. Public conveniences like vending machines?	Yes		No
	Is a toilet provided within the subway, or near the entrance vestibule, or within 1 km?	Yes		No
	Is the subway/bridge visible from the lift, stairs, ramp, or escalator without any obstructions?	Yes		No
	Are the signages and entrances to connecting amenities clear and easy to see?	Yes		No
COMFORT				
Shade	Does the canopy at all entrances cover the full width and length of the stairway, escalator, ramp, and lift, extending at least 300mm beyond?	Yes		No

INDICATORS	SCORING	1	0.5	0
Seating Provisions	Is there seating every 20 meters?	Yes		No
	Is each seat at least 1.5 meters long?	Yes		No
	Does the seating stay clear of minimum walking paths width?	Yes		No
	Is the height of the seating provided at 450mm from the floor level?	Yes		No
Toilets (Applicable for Subways)	If a public toilet is not available within 1 km, is a toilet provided inside the subway?	Yes		No
Drinking water	Is drinking water available next to the toilet or at least once every 100 meters?	Yes	Yes, but not within distance prescribed/ not functional.	No
	Are drinking water taps provided at both adult and child/ wheelchair (0.5-0.55m) heights?	Yes		No
	Is there wheelchair clearance to access the low height drinking water tap?	Yes		No
Waste Disposal	Are there waste bins (including child-sized bins at 0.45-0.5 meters in height) at every 100 meters?	Yes		No
	Are the bins segregated with signage communicating the type of waste?	Yes		No
	Are waste bins adequately managed without overflowing?	Yes	Yes, in some cases.	No
Noise and Sound Mitigation	Are noise or sound mitigation measures installed to reduce excessive noise?	Yes		No
Commercial Kiosks / Vending Machines (Applicable only for Subways)	Do kiosks/vending machines avoid obstructing pedestrian flow?	Yes		No
	Is the kiosk/commercial outlet layout compact without compromising visibility?	Yes		No
SAFETY				
	Does the subway have security personnel?	Yes	Yes	No
	Is the subway/FOB fully covered by CCTV cameras in all areas?	Yes	Yes, but has blind spots/ are not functional	No
	Is the subway/FOB free from vandalism, alcohol bottles, and cigarette butts, ensuring a safe environment for users?	Yes		No
	Is the surrounding area free from user groups engaging in activities like gambling, unruly behavior, or intoxication that may cause discomfort to others?	Yes		No
	Are there emergency call buttons?	Yes		No
	Are there signage with Helpline numbers or nearest police booth info?	Yes		No
Only for subways	Are there phone charging stations in the subway?	Yes		No
LIGHTING				
	Is there 50 lux lighting at road-level entrance to the subway/FOB?	Yes	Yes, but not with adequate lighting lux level	No
	Are stairways, escalators, ramps, and lift lobbies have adequate lighting?	Yes	Yes, but some are not working	No
Lighting - Subway Interior	**Is the interior lighting at an average lux level of 100?**	Yes	Yes, but not well-lit	No
	Is emergency security lighting provided outside, especially at entrances and main access paths?	Yes		No
	Is the lighting temperature similar to daylight (around 4000K)?	Yes		No
	For long subways with a length-to-height ratio over 10:1, are light wells or similar features provided to ensure daylight-like lighting?	Yes		No
Lighting FOBs	Is the average lux level on the bridge 20?	Yes		No
	Is there adequate foot-level lighting on the bridge, in addition to general space lighting?	Yes		No
SIGNAGE				
	Is wayfinding signage provided at the infrastructure, including subway/FOB maps, local points of interest, and locality descriptions?	Yes	Yes, but it is not located correctly for users.	No
	Are informational signs (e.g., toilets, amenities, helplines) and instructional signs (e.g., garbage disposal methods) provided at the entrance of Subway/FOB?	Yes	Yes, but it is not located correctly for users.	No
	Is there informational signage provided? E.g. map layout of the park	Yes	Yes, but it is not located correctly for users.	No
	Are the signages at a correct reading height for adults and children?	Yes		No
	Is there tactile map provided for the map at the entrance?	Yes		No
	Are all signages multi-lingual and design consistent?	Yes		No

TOTAL SUBWAY/FOB SCORE: _____ / 71
TOTAL TOILET SCORE: _____ / 53
(IF INCLUDED IN THE SUBWAY)





07

STREETS

A Complete Street design with designated spaces for cyclists, cars, pedestrians and transit. Surrounding built environment creates opportunity to oversee street activities.
Photo Credit: Crandall Arambula

Design Checklist for Streets

INDICATORS	SCORING	1	0.5	0
PLANNING AND DESIGN				
Carriageway	ls the lane width as per standard IRC guidelines following traffic volume - 3M per lane for non-bus routes, and 3.5M per lane along bus routes?	Yes		No
	Is the road width (right-of-way) consistent between intersections?	Yes		No
	Is the road designed to reduce accidents at merging and diverging points?	Yes		No
	Is the design speed of the road lower than or equal to the posted speed limit?	Yes		No
For arterial, collector and local streets	Are there any traffic speed calming measures employed? E.g. Speed humps, Rumbler strips, Projecting kerbs, Material changes, Barricades etc.	Yes		No
Intersections and crossings	Are pedestrian crossings provided on all sides of the intersection?	Yes		No
	Are pedestrian crossings of width 3 metres or more?	Yes	Yes, only at some locations	No
	Are crossings/ mid-block crossings at logical locations e.g. entrances/exits to key destinations or connections to other paths?	Yes	Yes, only at some locations	No
	For at-grade pedestrian crossings: Are the crossings wheelchair accessible with kerb ramp on both ends leading safely to the footpath?	Yes	More than one set of kerb ramps is accessible	No
	For table-top crossings: Are there efficient safety barriers to avoid vehicles entering the footpath and accessible for wheelchair users?	Yes	Yes, only at some locations	No
	For roads with 3 or more lanes in one direction, is there a 1.2m wide pedestrian refuge island for safe crossing?	Yes		No
	Are the turning radii designed correctly for bus route roads and non-bus route roads?	Yes		No
	Is there a pedestrian signal?	Yes		No
	If yes, does the pedestrian signal timing allow for a crossing speed of 0.8 meters per second?	Yes		No
	Does the pedestrian signal include audible signals that activate automatically without the need for push buttons?	Yes		No
	Are there dedicated cycling lanes on the street?	Yes		No
On-street parking	Is paid parking provided for both two-wheelers and four-wheelers with clear signage?	Yes	Yes, but no signage is present	No
	Are parking restrictions implemented at intersections and mid-block crossings?	Yes		No
	Is parking provided continuously 25 metres along the street or less?	Yes		No
	Are no parking zones clearly demarcated?	Yes		No
IPT Infrastructure	Are dedicated drop-off/ pick-up zones provided near institutions, commercial areas, and transit stations?	Yes		No
	Is IPT parking restricted near intersections, mid-block crossings, and bus stops?	Yes	Yes, but only in some areas	No
COMFORT & SAFETY				
Footpath	Is there a minimum 1.8m wide footpath?	Yes	Yes, but it varies along the street - with some areas < 1.8m	No
	Is this footpath continuous and unobstructed suitable for use by prams, wheelchairs and mobility-impaired persons?	Yes		No

INDICATORS	SCORING	1	0.5	0
	Is the height of footpath 0.15m?	Yes		No
	Is there a 0.5m (minimum) utility strip in addition to the 1.8m pathway for trash cans, light and electric poles, trees, safety barriers, and street furniture?	Yes	Yes, but only in some areas	No
	Is there a minimum vertical clearance of 2.4 meters above the footpath so that poles, signs, trees, or other objects don't block visibility or movement?	Yes	Yes, but only in some areas	No
	Is the slope from the footpath to the road as per Harmonised Guidelines?	Yes	Yes, but only in some areas	No
	Can vision impaired pedestrians identify the crossing via tactile surfaces provided?	Yes	Yes, but only in some areas	No
Seating	Is seating provided at intervals of 100m or lesser along the footpath?	Yes	Seating is provided but at larger intervals than 100m	No
	Are atleast 50% of the seats with back rests and arm rests?	Yes		No
Waste Management	Are there garbage bins every 50-80m?	Yes		No
Shade	Is the footpath shaded?	Yes	Yes, but only in some areas/ some times of the day	No
SAFETY				
	Is separation provided between motorists and pedestrians? E.g. Level difference, Safety Rail, Bollards, Trees, shrubs etc.	Yes		No
Safety Barriers - Bollards	Are bollards installed at the recommended height (0.5 to 0.7 meters) with a clear width of 0.6 meters between them, and at least one section with a 0.9-meter width for wheelchair access?	Yes		No
	Are bollards equipped with reflective strips for visibility, especially in low-light conditions?	Yes		No
	Are bollards placed in a way that blocks vehicles but still allows people, including wheelchair users, to pass through easily?	Yes		No
Safety Barriers - Railing	Is a railing used only where it's really needed — like near high speed traffic, busy crossings, transit stations, schools, or markets?	Yes		No
	Are railings at a height of less than 0.9 meters and ensures maximum transparency?	Yes		No
	Do the railings allow people, including those using wheelchairs, to move freely on and off the footpath without blocking the way?	Yes		No
Surveillance	Are the cameras clear (high-resolution), durable in all weather, and able to see well at night?	Yes		No
	Is CCTV footage recorded and monitored in a local police station or appropriate control center?	Yes		No
	Are cameras positioned at 50-100 meters apart (or as per vendor recommendations) to minimize blind spots?	Yes		No
	Are cameras mounted at a height of 3-6 meters, covering a broad area without obstructing pedestrian or vehicular views?	Yes		No
LIGHTING				
	Are lux levels as per street type: NMT/Local Streets: 10-15 lux Collector Streets: 15-20 lux Expressways: 20-30 lux	Yes		No
	If the streetlight is placed in the central median, is there sufficient light distribution along the footpath?	Yes		No
SIGNAGE				
	Is the road signage clutter-free?	Yes		No
	Is the signage text readable by size and colour?	Yes		No
	Is signage provided to guide and direct pedestrians to the key destinations in the area?	Yes		No
	Are street names clearly visible to pedestrians?	Yes		No
	Are pedestrian routes/crossings clearly visible to motorists via warning signs and pavement markings?	Yes		No
	Are the signage and pavement markings visible during day & night?	Yes		

TOTAL STREET SCORE: _____ / 52

08

OPEN & CLOSED MARKETS

Chandni Chowk Redevelopment
Courtesy: Getty Images

New Market, Kolkatta - Indoor
Courtesy: Tripoto

Design Checklist for Open and Closed Markets

INDICATORS	SCORING	1	0.5	0
OPENNESS / VISIBILITY				
	Does the boundary wall allow partial or full visibility from the street?	Full visibility	Partial visibility	No visibility
	If a boundary wall exists, is the height lesser than 1.5m?	Yes		No
	Is parking along the building/road edge obstructing direct access to the market?	Yes		No
ACCESS TO THE INFRASTRUCTURE				
Pedestrian Access	Are mandatory unobstructed footpaths (minimum 2m wide) provided within a 500m walking distance of the market?	Yes		No
	What is the condition of this footpath? Poor condition: Completely broken or does not exist Moderate condition: Partially broken, wheelchair can move without difficulty Good condition: Wheelchair can easily move	Good	Moderate	Poor
	Is this footpath continuous and unobstructed? Obstructions include bollards, gate guardrails, drains, trees, etc. that hinder wheelchair movement	Yes		No
	Are the footpaths connected to safe, wheelchair-accessible pedestrian crossings at the nearest intersections?	Yes		No
	Are there tactile floor markings to guide visually impaired users to entrances/exits?	Yes	Yes, but some tiles are broken.	No
	If there a level difference between the market premises and the footpath outside the market, is a ramp with a handrail provided to enter the Market premises?	Yes	Yes, but the ramp slope is very steep.	No
	Is the market pedestrian entrance atleast 2 metres wide?	Yes		No
Vehicular / Public Transportation	Is the market entrance within 500m or less from public transport options like buses, metro, or MRTS?	Yes		No
	Is there a designated drop-off and pick-up spot for autos and other IPTs within 50 meters of the market entrance?	Yes		No
	Is there signage indicating the transportation options, such as public transit (buses, metros, etc.) and IPT services (autos, taxis, ride-sharing) inside/outside the market?	Yes		No
	Is parking available as per local building norms?	Yes		No
	Are there clear, designated parking areas available for PWD and pregnant women?	Yes		No
	Are there electrical charging points for EV vehicles in the parking area?	Yes		No

INDICATORS	SCORING	1	0.5	0
ACCESS WITHIN THE INFRASTRUCTURE				
Pedestrian Access	Is the market floor surface non-slip?	Yes		No
	Are tactile tiles installed for warning and guidance?	Yes		No
	Are slopes inside designed to avoid water stagnation?	Yes		No
	Are all interior market areas flat, with ramps where there are level changes?	Yes		No
	If the market is multi-level, are there stairs, lifts, and escalators(optional) present?	Yes		No
	If the market is multi-level, do the stairs have consistent depth of 300mm, 150mm risers, and width as per norms?	Yes		No
	If the market is multi-level, do the lift controls have accessible features like foot-operated buttons?	Yes		No
DESIGN				
Overall Site	Is there a safe space to wait near the market entrance, pick up and drop-off point or gate?	Yes		No
	Do service vehicles enter, exit, and move without crossing paths with people walking or other vehicles?	Yes		No
	Is there a clear walking path from the gate to the market building without vehicular conflicts?	Yes		No
	Do shop frontages provide direct access from the road?	Yes		No
	Are frontages of the building active with features like open shops, displays, or seating (not just closed windows or inward-facing shops)?	Yes		No
Design	Does the layout make sure all vendors are easy to see and get regular foot traffic from main walking paths?	Yes		No
	Do individual shop layouts have enough space for the seller to sit and stand comfortably and display products clearly?	Yes		No
	Is there a minimum corridor width of 2m?	Yes		No
	Are corridors wide enough? – One-side shops: 2 to 2.4 meters wide – Both-side shops: 2.4 to 3 meters wide	Yes		No
	Is there enough space in front of the shops for people to interact with shopkeepers without blocking the minimum corridor widths?	Yes		No
	Do stairs, ramps, lifts, and escalators have enough landing space on all floor levels without blocking the minimum corridor widths?	Yes		No
Wet Markets (Vegatable/ Meat/Fish Markets)	Is there sufficient provisions for drainage planned in the market?	Yes		No
	Are there sufficient provisions for light and ventilation to control odours and air quality?	Yes		No
	Are there cutting stations, ice storage units, at fish/meat markets?	Yes		No
	Are there grates and traps to stop debris from blocking the drains?	Yes		No
COMFORT				
Toilets	Separate toilets for shop owners, common toilets in enclosed market building, and/or public toilet for outdoor floating population has been provided as per NBC norms?	Yes		No
Seating	Is seating provided every 20 meters?	Yes		No
	Is each seating section at least 1.5 meters long?	Yes		No
	Does the seating block the minimum corridor widths?	Yes	Yes, in some cases	No
	Is the height of the seating provided at 450mm from the floor level?	Yes		No
Light and Ventilation	Does each stall have enough light and fresh air through windows or the partitions are 2.1m high and open above that?	Yes		No
	Does each stall have individual artificial light (tubelights/ bulbs) and ventilation (fan/HVAC) provisions	Yes		No
Drinking Water	Are Drinking water facilities provided adjacent to every restroom facility or atleast one in every 50m.	Yes	Yes, but not within distance prescribed/ not functional.	No
	Are drinking water taps provided at both adult and child/ wheelchair (0.5-0.55m) heights?	Yes		No
	Is there wheelchair clearance to access the low height drinking water tap?	Yes		No
Waste Disposal	Are customer wastebins at 20m intervals in the market areas?	Yes		No
	Are there waste bins (including child-sized bins at 0.45-0.5 meters in height) at every 100 meters?	Yes		No
	Are the bins segregated with signage communicating the type of waste?	Yes		No
	Is there a separate disposal point for seller wet and dry waste?	Yes	Yes, but no segregation between wet and dry waste	No
	Are all waste bins (customer and seller) managed without overflowing?	Yes	Yes, in some cases.	No

INDICATORS	SCORING	1	0.5	0
SAFETY				
Surveillance	Does the market have security personnel? And do they have a dedicated space for keeping their belongings?	Yes	Yes, but no dedicated space for keeping their belongings	No
	Is the market equipped with CCTV camera covering all interior and exterior spaces and avoiding blind spots?	Yes		No
	Are there emergency call buttons at the market?	Yes		No
	Are there electrical sockets for people to charge phones?	Yes		No
LIGHTING				
	Is the average lighting level at least 50 lux in outdoor areas around the market?	Yes		No
	Is the average lux level for general lighting between 300-500 lux?	Yes		No
	Is the average lux level for display lighting between 500-1000 lux?	Yes		No
	Is the average lux level for corridors between 150-300 lux?	Yes		No
	Are high-lumen floodlights used in parking and other exterior areas?	Yes		No
	Is emergency security lighting installed at all entrances and main access routes inside and outside the market?	Yes		No
SIGNAGE				
	Are signboards placed at all entrances and along main walking routes?	Yes		No
	Are there clear signs showing maps, shop lists, toilet locations, and helpline numbers?	Yes		No
	Is there a Public Address System in the station?	Yes		No
	Are there signs that give instructions, like how to throw away garbage?	Yes		No
	Is there a voice-activated wayfinding system that provides descriptions of directions or key amenities in the market including closing times, emergency routes, regular information on toilets, drinking water,etc.	Yes	Yes. Some information is available through voice systems	No

INDICATORS	SCORING	1	0.5	0
	Are the signages at a correct reading height for adults and children?	Yes	Yes, but they are not consistent or available throughout the market.	No
	Is there tactile map provided for the map at the entrance?	Yes	Yes, but it is not located correctly for users.	No
	Are all signages multi-lingual?	Yes	Yes, but they are not consistent or available throughout the market.	No
	Is the signage consistent in design and/ or as per standards?	Yes		No

TOTAL MARKET SCORE: _____ / 72
TOTAL TOILET SCORE: _____ / 53


EXIT
DRINKING WATER
TOILET

09

URBAN DELIVERY CENTRES

Design Checklist for Urban Delivery Centres

INDICATORS	SCORING	1	0.5	0
OPENNESS / VISIBILITY				
	If a boundary wall exists, does the boundary wall allow partial or full visibility from the street?	Full visibility	Partial visibility	No visibility
	If a boundary wall exists, is the height lesser than 1.5m?	Yes		No
	If there is no boundary wall, is there at least a 1.0m setback for waiting and queuing, or is the facility located within a campus with clear signage to guide users?	Yes		No
	Is parking along the building/road edge obstructing direct access to the UDC?	Yes		No
ACCESS TO THE INFRASTRUCTURE				
Pedestrian Access	Are mandatory unobstructed footpaths (minimum 2m wide) provided within a 500m walking distance of the UDC?	Yes		No
	What is the condition of this footpath? Poor condition: Completely broken or does not exist Moderate condition: Partially broken, wheelchair can move without difficulty Good condition: Wheelchair can easily move	Yes	Moderate	No
	Is this footpath continuous and unobstructed? Obstructions include bollards, gate guardrails, drains, trees, etc. that hinder wheelchair movement	Yes		No
	Are the footpaths connected to safe, wheelchair-accessible pedestrian crossings at the nearest intersections?	Yes		No
	If the main intersection is more than 50 meters away, is a mid-block crosswalk or raised intersection provided near the market entrance?	Yes		No
	For large facilities integrated with other public services, including a UDC, are traffic calming measures used near the entrances? (speed beakers, roundabouts, chicanes, etc)	Yes		No
	Are there tactile floor markings to guide visually impaired users to entrances/exits?	Yes	Yes, but some tiles are broken.	No
	If there a level difference between the UDC premises and the access pathway outside the market, is a ramp with handrail provided to enter the market premises?	Yes	Yes, but the ramp slope is very steep.	No
	Is the UDC pedestrian entrance atleast 2 metres wide?	Yes		No

INDICATORS	SCORING	1	0.5	0
Vehicular / Public Transportation	Is the UDC entrance within 1 kilometer or less from public transport options like buses, metro, or MRTS?	Yes		No
	Is there a designated drop-off and pick-up spot for autos and other IPTs within 50 meters of the UDC entrance?	Yes		No
	Is there signage indicating the transportation options, such as public transit (buses, metros, etc.) and IPT services (autos, taxis, ride-sharing)?	Yes		No
	Is parking available as per local building norms?	Yes		No
	Are there clear, designated parking areas available for PWD and pregnant women?	Yes		No
	Are there electrical charging points for EV vehicles in the parking area?	Yes		No
ACCESS WITHIN THE INFRASTRUCTURE				
Pedestrian Access	If the facility is located within a campus, is there a clear walking path from the gate to the UDC building without vehicular conflicts?	Yes		No
	Is the UDC floor surface non-slip?	Yes		No
	Are tactile tiles installed for warning and guidance?	Yes		No
	Are all interior UDC areas flat, with ramps where there are level changes?	Yes		No
	If UDC is multi-level, are there stairs, lifts, and escalators(optional) present?	Yes		No
	If UDC is multi-level, do the stairs have consistent depth of 300mm, 150mm risers, and width as per norms?	Yes		No
	If UDC is multi-level, do the lift controls have accessible features like foot-operated buttons?	Yes		No
DESIGN				
Overall Site	Is there a safe space to wait near the UDC entrance, pick up and drop-off point or gate?	Yes		No
	If applicable, do service vehicles enter, exit, and move without crossing paths with people walking or other vehicles?	Yes		No
	Does the centre's frontages provide direct access from the road?	Yes		No

INDICATORS	SCORING	1	0.5	0
	Are frontages of the building active with features like open shops, displays, or seating (not just closed windows or inward-facing shops)?	Yes		No
E-Sevvai Centres	Are there enough service counters based on the number of people using the facility? (For example: 3 counters for every 5000 people.)	Yes		No
	Is there enough space for people to wait comfortably inside? (Is it well-ventilated and does it have lights and fans?)	Yes		No
	Is the waiting area and office room designed for air to flow through from two sides?	Yes		No
	Is there shaded space outside for people to wait in line?	Yes		No
	Are services and token numbers shown clearly on screens and announced out loud?	Yes		No
	Are the information boards written in multiple languages?	Yes		No
Ration Shops	Is the shop size as per rules? (440 sq. ft. for less than 500 ration cards, 550 sq. ft. for more than 500 ration cards.)	Yes		No
	Is the storage room (godown) at least 14 feet (4.28 meters) high?	Yes		No
	Are there clear paths inside the godown to help identify and manage stock?	Yes		No
	Does the shop have 2–3 service counters if it serves 500–700 ration cards to avoid crowding?	Yes		No
	Is there a shaded waiting area outside the shop for at least 20 people?	Yes		No
	Is there enough space inside the shop for 6–8 people, including older or disabled persons?	Yes		No
	Is there a covered loading/unloading platform that doesn't block customers or daily activities?	Yes		No
Amma Unavagams (Food Canteens)	Are there different types of eating areas—some with chairs and some with standing counters?	Yes		No
	Do the service counters have a low section for persons with disabilities?	Yes		No
	Is the kitchen: - Well-ventilated? - Using non-slip flooring?	Yes		No

INDICATORS	SCORING	1	0.5	0
	Are there handwashing stations and public toilets near the dining area?	Yes		No
	Are fire extinguishers installed, and are emergency exits clearly marked?	Yes		No
	Does the design include big windows or open spaces for fresh air and ventilation?	Yes		No
COMFORT				
Toilets	Is a toilet block attached to E-Sevai Centres or Amma Unavagams?	Yes		No
	In Ration Shops, where space is limited, is a public toilet available within 500 meters?	Yes		No
	Does the center provide separate toilet facilities for staff within the premises and separate customer toilets with independent access?	Yes		No
Seating (E-Sevvai Centre)	Is there 1 seat for every 5 visitors expected per hour?	Yes		No
	Is extra seating or leaning rails (at 1150mm height) provided outside for people who may need to wait in line on busy days?	Yes		No
	Is the height of the seating provided at 450mm from the floor level?	Yes		No
	Do the seats have backrests and armrests for better comfort?	Yes		No
Seating (Ration Shop)	Based on allocated space for queueing, is there seating provided at regular intervals?	Yes		No
	Is the height of the seating provided at 450mm from the floor level?	Yes		No
	Do the seats have backrests and armrests for better comfort?	Yes		No
Seating (Amma Unavagam)	Are there enough places for people to sit?	Yes		No
	Are there tables with space for wheelchair users?	Yes		No
	Is the height of the seating provided at 450mm from the floor level?	Yes		No
	Do the seats have backrests and armrests for better comfort?	Yes		No
Child Care facilities	Necessary for Amma Unavagams, Optional for E-Sevvai Centres and Ration shops - Is there a dedicated childcare facility/ balwadi near or within the premises, but away from kitchen and other store areas of hazardous items?	Yes		No
Shading/ Thermal comfort	Is there shade above entrance point, queuing lines, exterior waiting areas, and exterior dining areas?	Yes		No

INDICATORS	SCORING	1	0.5	0
Drinking Water	Are Drinking water facilities provided adjacent to every restroom facility or atleast one in every 50m.	Yes	Yes, but not within distance prescribed/ not functional.	No
	Are drinking water taps provided at both adult and child/ wheelchair (0.5-0.55m) heights?	Yes		No
	Is there wheelchair clearance to access the low height drinking water tap?	Yes		No
Waste Disposal	In Amma Unavagams, is there a separate disposal point for wet and dry waste?	Yes		No
	Are there waste bins (including child-sized bins at 0.45-0.5 meters in height) at every 100 meters?	Yes		No
	Are the bins segregated with signage communicating the type of waste?	Yes		No
	Are all waste bins managed without overflowing?	Yes	Yes, in some cases.	No
SAFETY				
Surveillance	Does the UDC have security personnel? And do they have a dedicated space for keeping their belongings?	Yes	Yes, but no dedicated space for keeping their belongings	No
	Is the UDC equipped with CCTV camera covering all interior and exterior spaces and avoiding blind spots?	Yes		No
	Are there emergency call buttons at the UDC?	Yes		No
	Are there electrical sockets for people to charge phones?	Yes		No
LIGHTING				
	Is the average lighting level at least 50 lux in outdoor areas around the UDC?	Yes		No
	Is the minimum interior illumination levels: Amma Unavagam and Ration shops: 150lux. E-Sevai centres: 500lux.	Yes		No
	Is emergency security lighting installed at all entrances and main access routes inside and outside the UDC?	Yes		No
SIGNAGE				
	Are signboards placed at all entrances and along main walking routes?	Yes		No

INDICATORS	SCORING	1	0.5	0
	Is there a voice-activated wayfinding system that provides information, descriptions of directions or key amenities in the UDC including closing times, emergency routes, regular information on toilets, drinking water,etc.	Yes	Yes. Some information is available through voice systems	No
	Are the signages at a correct reading height for adults and children?	Yes	Yes, but they are not consistent or available throughout the UDC.	No
	Is there tactile map provided for the map at the entrance?	Yes	Yes, but it is not located correctly for users.	No
	Are all signages multi-lingual?	Yes	Yes, but they are not consistent or available throughout the UDC.	No
	Is the signage consistent in design and/ or as per standards?	Yes		No

TOTAL UDC SCORE: _____ / 85
TOTAL TOILET SCORE: _____ / 53

நியாய விலை கடை
RATION SHOP

←TOILET

விலைபட்டியல்
அரிசி
பருப்பு
சர்க்கரை
எண்ணெய்
கோதுமை

DRINKING WATER

அரசு
இ-சேவை மையம்

கழிப்பறை
←
TOILET

TOKEN NO
13

விசாரணை
ENQ

ADHAAR REGISTRATI
ஆதார் பதிவு மைய

←
கழிப்பறை

உணவு வழங்குமிடம்

உணவு விலை
பட்டியல்

10

COMMUNITY HALLS

Design Checklist for Community Halls

INDICATORS	SCORING	1	0.5	0
OPENNESS / VISIBILITY				
	If a boundary wall exists, does the boundary wall allow partial or full visibility from the street?	Full visibility	Partial visibility	No visibility
	If a boundary wall exists, is the height lesser than 1.5m?	Yes		No
	Does the community hall's exterior promote interaction with the public street—like plants, art, or info boards that invite people to stop and engage?	Yes		No
ACCESS TO THE INFRASTRUCTURE				
Pedestrian Access	Are mandatory unobstructed footpaths (minimum 2m wide) provided within a 500m walking distance of the community hall?	Yes		No
	What is the condition of this footpath? Poor condition: Completely broken or does not exist Moderate condition: Partially broken, wheelchair can move without difficulty Good condition: Wheelchair can easily move	Good	Moderate	Poor
	Is this footpath continuous and unobstructed? Obstructions include bollards, gate guardrails, drains, trees, etc. that hinder wheelchair movement	Yes		No
	Are the footpaths connected to safe, wheelchair-accessible pedestrian crossings at the nearest intersections?	Yes		No
	Are there tactile floor markings to guide visually impaired users to entrances/exits?	Yes	Yes, but some tiles are broken.	No
	If there a level difference between the community hall premises and the footpath outside the hall, is a ramp with a handrail provided to enter the hall premises?	Yes	Yes, but the ramp slope is very steep.	No
	Is the community hall pedestrian entrance atleast 2 metres wide?	Yes		No
	Are traffic calming measures used near the community hall entrance? (speed beakers, roundabouts, chicanes, etc)	Yes		No
	In residential neighborhoods, are traffic calming measures used near the station entrance? (speed beakers, roundabouts, chicanes, etc) In mixed-use or high-traffic neighborhoods, are mid-block crosswalks or raised intersections provided for safe access to entrance gateways?	Yes		No
Vehicular / Public Transportation	Is the community hall entrance within 500m or less from public transport options like buses, metro, or MRTS?	Yes		No
	Is there a designated drop-off and pick-up spot for autos and other IPTs near the entrance?	Yes		No
	Is there signage indicating the transportation options, such as public transit (buses, metros, etc.) and IPT services (autos, taxis, ride-sharing)?	Yes		No
	Is parking available as per local building norms?	Yes		No
	Are there clear, designated parking areas available for PWD and pregnant women?	Yes		No
	Are there electrical charging points for EV vehicles in the parking area?	Yes		No
	Does the hall's layout allow unobstructed access for emergency and service vehicles, with gates at least 6 meters wide?	Yes		No
ACCESS WITHIN THE INFRASTRUCTURE				
Pedestrian Access	Are tactile tiles installed for warning and guidance?	Yes		No
	Is there a ramp (as per Harmonised Guidelines 2016 standards) next to the steps for entering the building?	Yes		No
	Are all interior community hall areas flat, with ramps where there are level changes?	Yes		No
	If the hall is multi-level, are there stairs, lifts, and escalators(optional) present?	Yes		No
	If the hall is multi-level, do the stairs have consistent depth of 300mm, 150mm risers, and width as per norms?	Yes		No
	If the hall is multi-level, do the lift controls have accessible features like foot-operated buttons?	Yes		No
	Do staircases have handrails on both sides and clear markings for visual impaired users?	Yes		No
	Are main corridors at least 4 meters wide and other paths at least 1.8 meters wide?	Yes		No
DESIGN				
Overall Site	Is there a safe space to wait near the community hall entrance, pick up and drop-off point or gate?	Yes		No
	Do service vehicles enter, exit, and move without crossing paths with people walking or other vehicles?	Yes		No

INDICATORS	SCORING	1	0.5	0
	Is there a clear walking path from the gate to the community hall building without vehicular conflicts?	Yes		No
Design	Is storage provided for footwear/belongings?	Yes		No
	If a stage is provided, are there two green rooms with direct, private access to the stage?	Yes		No
	Does the hall have the recommended ceiling height (4m for small halls, 6-8m for larger halls or play areas)	Yes		No
	Are fire safety systems (prevention, detection, suppression) implemented as per applicable norms?	Yes		No
COMFORT				
Handwash	Are multiple wash basins provided adjacent to dining and toilet areas in large halls with separate dining spaces?	Yes		No
	Is at least one wash basin designed at a child-friendly height?	Yes		No
Toilets	Are toilet facilities provided both in exterior areas within the boundary wall and inside the hall?	Yes		No
Seating	Is outdoor and indoor seating provided?	Yes		No
	Is the height of the seating provided at 450mm from the floor level?	Yes		No
Light and Ventilation	Is the hall's window area at least 10% of the floor area, as per NBC recommendations?	Yes		No
	Does the main hall have openings (windows) on opposite walls to allow cross ventilation?	Yes		No
	Are openings or ventilators placed high on the walls to help dissipate heat effectively?	Yes		No
Drinking Water	Are Drinking water facilities provided adjacent to every restroom facility?	Yes		No
	Are drinking water facilities provided in the exterior areas?	Yes		No
	Are drinking water taps provided at both adult and child/ wheelchair (0.5-0.55m) heights?	Yes		No
	Is there wheelchair clearance to access the low height drinking water tap?	Yes		No
Waste Disposal	Are there waste bins (including child-sized bins at 0.45-0.5 meters in height) every 100m?	Yes		No
	Are the bins segregated with signage communicating the type of waste?	Yes		No
	Are waste bins providied in exterior areas?	Yes		No

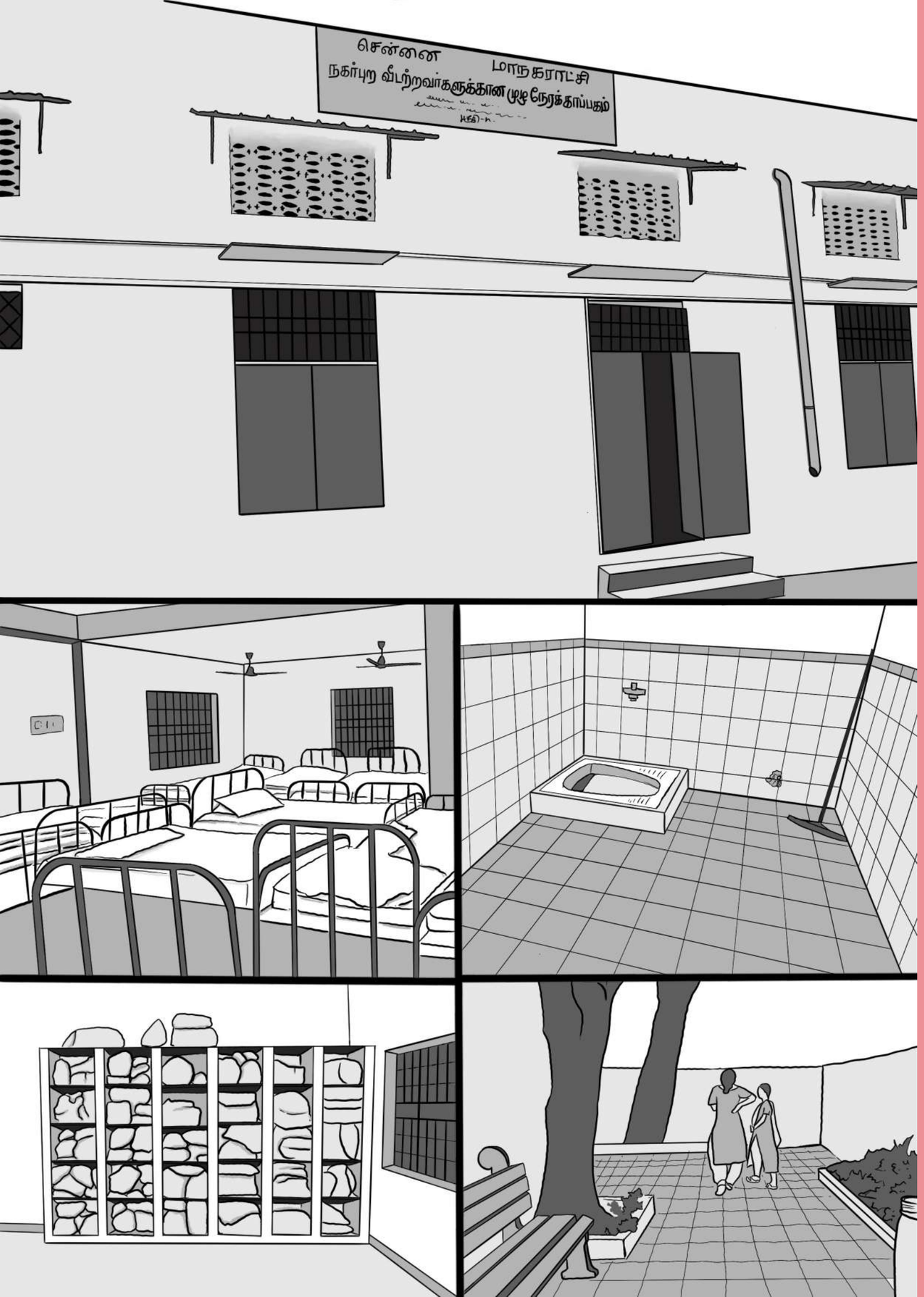
INDICATORS	SCORING	1	0.5	0
SAFETY				
Surveillance	Does the community hall have security personnel? And do they have a dedicated space for keeping their belongings?	Yes	Yes, but no dedicated space for keeping their belongings	No
	Are CCTV cameras installed at all entrances, interior halls, parking areas, service/loading zones, near restrooms, and major circulation zones?	Yes		No
	Are there emergency call buttons at the station?	Yes		No
	Are there electrical sockets for people to charge phones?	Yes		No
LIGHTING				
	Is the average lighting level at least 50 lux in outdoor areas around the community hall?	Yes		No
	Is the average lux level for interior lighting of the hall between 200-500 lux?	Yes		No
	Are high-lumen floodlights used in parking and other exterior areas?	Yes		No
	Is emergency security lighting installed at all entrances and main access routes inside and outside the community hall?	Yes		No
SIGNAGE				
	Are well-lit signages installed at entrances, exits, main halls, and near restrooms to provide clear guidance?	Yes		No
	Are safety and emergency signages placed at all exits and near emergency equipment?	Yes		No
	Are the signages and auditory systems visible and audible from 5-10 meters away?	Yes		No
	Are the signages at a correct reading height for adults and children?	Yes	Yes. Inconsistent / not throughout the hall.	No
	Are all signages multi-lingual?	Yes	Yes. Inconsistent / not throughout the hall.	No
	Is the signage consistent in design and/ or as per standards?	Yes		No

TOTAL COMMUNITY HALL SCORE: _____ / 66
TOTAL TOILET SCORE: _____ / 53

சமுதாய நலக் கூடம்

IWC

IWC



11

SHELTERS FOR THE URBAN HOMELESS

Dormitories in Orange County Homeless Shelters provides privacy for every occupant with dedicated storage space.
Photo Credit: GMBI.net

Mary's Place Family Homeless Shelter, Seattle, Washington's Children's Play space
Photo Credit: Amazon

Design Checklist for Shelters for the Urban Homeless

INDICATORS	SCORING	1	0.5	0
OPENNESS / VISIBILITY				
	Does the boundary wall allow partial or full visibility from the street?	Full visibility	Partial visibility	No visibility
	Is the height of the boundary wall 1.5m or lesser?	Yes		No
ACCESS TO THE INFRASTRUCTURE				
Pedestrian Access	Are mandatory unobstructed footpaths (minimum 2m wide) provided within a 500m walking radius from the shelter's entry gates?	Yes		No
	What is the condition of this footpath? Poor condition: Completely broken or does not exist Moderate condition: Partially broken, wheelchair can move without difficulty Good condition: Wheelchair can easily move	Good	Moderate	Poor
	Is this footpath continuous and unobstructed? Obstructions include bollards, gate guardrails, drains, trees, etc. that hinder wheelchair movement	Yes		No
	Are the footpaths connected to safe, wheelchair-accessible pedestrian crossings at the nearest intersections?	Yes		No
	Are there tactile floor markings to guide visually impaired users to entrances/exits?	Yes	Yes, but some tiles are broken.	No
	If there a level difference between the shelter's premises and the footpath outside, is a ramp with a handrail provided to enter the shelter premises?	Yes	Yes, but the ramp slope is very steep.	No
	Is the shelter's pedestrian entrance atleast 2 metres wide?	Yes		No
	Are traffic calming measures used near the shelter entrance? (speed beakers, roundabouts, chicanes, etc)	Yes		No
Vehicular / Public Trasnportation	Is the shelter well-connected to public transportation options like buses, metro trains, or MRTS?	Yes		No
	Is there signage indicating the transportation options, such as public transit (buses, metros, etc.) and IPT services (autos, taxis, ride-sharing)?	Yes		No
	Is parking available as per local building norms?	Yes		No
	Are there clear, designated parking areas available for PWD and pregnant women?	Yes		No
	Does the hall's layout allow unobstructed access for emergency and service vehicles, with gates at least 6 meters wide?	Yes		No

INDICATORS	SCORING	1	0.5	0
ACCESS WITHIN THE INFRASTRUCTURE				
Pedestrian Access	Are tactile tiles - warning and navigation tiles present at least in the public areas of the shelter?	Yes		No
	Is there a ramp (as per Harmonised Guidelines 2016 standards) next to the steps for entering the building?	Yes		No
	Are all interior shelter areas flat, with ramps where there are level changes?	Yes		No
	Can people move easily from the entrance to all areas inside the shelter without anything blocking the way?	Yes		No
	Are all walkways at least 1.25 meters wide so people, including wheelchair users, can move safely?	Yes		No
	Are all doors at least 900 mm wide and designed for ease of use (two-way swinging or sliding, lightweight)?	Yes		No
	If the shelter is multi-level, are there stairs and lifts present?	Yes		No
	If the shelter is multi-level, do the stairs have consistent depth of 300mm, 150mm risers, and width as per norms?	Yes		No
	Do staircases have handrails on both sides and clear markings for visually impaired users?	Yes		No
	If the shelter is multi-level, do the lift controls have accessible features like foot-operated buttons?	Yes		No
DESIGN				
Public Areas	Is there enough space at the entrance and lobby for a reception/security desk, and for keeping shoes, helmets, and wheelchairs?	Yes		No
	Are staff toilets provided?	Yes		No
	Is the entrance path wide and barrier-free (at least 1.5 meters) for easy access?	Yes		No
Semi Private Spaces	Is there 2 to 2.5 square meters of space per person in common areas, depending on the activities and facilities available?	Yes		No
	Can the multi-purpose activity rooms be easily changed in layout using movable walls or modular furniture?	Yes		No
	Are the activity rooms designed to support different uses like meetings, skill training, and leisure?	Yes		No
	Is the kitchen at least 15–20 square meters in size for serving about 50 people?	Yes		No
	Are there handwashing basins near dining areas and kitchens, with at least 3 to 5 basins if the shelter serves 50–80 people?	Yes		No

INDICATORS	SCORING	1	0.5	0
Private Residential Spaces	Does each resident have at least 4.5 to 5 square meters of space in the dormitory, as per national guidelines?	Yes		No
	Are both single and double occupancy rooms available, to give options for privacy or isolation when needed?	Yes		No
	Are bathrooms close to sleeping areas and accessible for persons with disabilities?	Yes		No
	Are there enough toilets for women as per standards (1 toilet, 1 washbasin, 1 shower for every 6 women)?	Yes		No
	Are the toilet cubicles fully equipped and accessible, with washbasins, toilets (WCs), and showers?	Yes		No
	Is there a place to wash clothes inside the bathing area or in a separate shaded area in the shelter?	Yes		No
	Is there a dry area before the toilets with mirrors and curtains that can be used as a dressing space?	Yes		No
	Are lockers or storage spaces of different sizes provided for each resident?	Yes		No
COMFORT & SAFETY				
Medical Facilities	Are there first-aid stations/kits and basic medical care room?	Yes		No
	Is there a provision for a counselling room?	Yes		No
Children Care Facilities	Is at least one wash basin in toilets designed at a child-friendly height?	Yes		No
	In shelters for women and transpersons, is there a nursery/playroom for children below 5 years?	Yes		No
Recreational Amenities	Are the setback and the spaces around the shelter planned for outdoor play activities?	Yes		No
Light and Ventilation	Is there light provision given in all interior spaces?	Yes		No
	Do all exterior areas have lights of minimum 50lux level?	Yes		No
	Are the window sizes designed in relation to the size of the rooms?	Yes		No
Electrical Sockets	Are there sufficient electrical sockets provided in all sleeping areas, recreational areas at 900mm from floor level?	Yes		No
Waste Disposal	Are there adequate segregated garbage disposal areas provided?	Yes		No
Surveillance	Is the facility equipped with CCTV Cameras in public and semi-public areas?	Yes		No

TOTAL SHELTER FOR THE URBAN HOMELESS SCORE: _____ / 52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12

PUBLIC TOILETS

Public Toilet abutting Race Course Road Walkway, Coimbatore.
Photo Credit: Tejaswini Baskaran

Design and Planning Checklist for Public Toilets

INDICATORS	SCORING	1	0.5	0
PLANNING AND DESIGN				
Location	What is the distance from the nearest public toilet?	1.5 kms or less		More than 1.5 kms
Openness	Is the toilet block and signage visible from the road?	Yes		No
	Are the toilet doors placed to block direct views into the toilet interiors?	Yes		No
Entering the Toilet	Is the path to the toilet at the same level as the surrounding footpath, or is there a ramp provided with handrails?	Yes		No
	Is there a roof or cover over the entrance, ramp, and stairs?	Yes		No
	Is the entrance clear of poles or drains that might block people with disabilities?	Yes		No
	Are there kerb ramps at the closest intersections and drop-off locations?	Yes		No
	Are there tactile floor markings to guide visually impaired users to entrances/exits?	Yes		No
	Can people with disabilities or pregnant persons easily move from on-street parking to the footpath and reach the toilet building safely?	Yes		No
Inside the Toilet	Is it easy for wheelchair users to turn and access the space? A minimum turning radius of 1.5M is provided where required?	Yes		No
	Are wheelchair-accessible stalls wide enough with doors at least 900mm?	Yes		No
	Do the doors in wheelchair stalls open out, both ways, or slide?	Yes		No
	Are there tactile floor markings to guide visually impaired users inside toilets?	Yes		No
	Are all areas at the same level for wheelchairs, or provided with ramps or sloped edges where there are minor floor level changes?	Yes		No
	Is the floor material slip-resistant?	Yes		No
	Does the toilet provide facilities for women, men, and persons with disabilities?	Yes		No
	Does the toilet provide facilities for gender-neutral or non-binary individuals, and families?	Yes		No
COMFORT				
	Is there enough space for people to wait in line, with seating options available?	Yes	No space for seating	No
	Are the entrances to Men's, Women's and other facilities away from each other?	Yes		No
	Are other toilet cubicles at least 1200mm x 1500mm in size?	Yes		No
	Are wheelchair accessible toilets at least 2200mm x 2000mm in size?	Yes		No
	Does the layout reduce unnecessary contact with walls or other surfaces with all corridors of minimum 1.5M width?	Yes		No
	Does the ratio of women's cubicles to men's cubicles and urinals meet a 2:1 ratio?	Yes		No
	Are there the same number of wash basins as cubicles?	Yes		No
	Is there a Diaper changing station in Women's, Men's and Gender Neutral toilet?	Yes		No

INDICATORS	SCORING	1	0.5	0
	Are there grab bars provided as per standards in all wheelchair accessible toilets?	Yes		No
	Are the WCs in all wheelchair accessible toilets mountable from both sides?	Yes		No
	Are changing rooms available if the toilet is next to a playground, beach, or similar place?	Yes		No
	Are at least half the stalls in all multi-cubicle toilets equipped with IWC options?	Yes		No
	Is there a Janitor facility attached to the Multi-cubicle toilet?	Yes		No
	Is the total size of wall openings at least 6% of the room's volume, or is proper mechanical ventilation provided (50–70 CFM per toilet or urinal)?	Yes		No
	Is the facility equipped with - 1. Coat Hooks 2. Phone stand/ shelf 3. Health Faucet 4. Sanitary Napkin dispenser 5. Mirror 6. Luggage/bag storage 7. Accessible Door and ventilator hardware	Yes all of these are provided	At least 4 of these are provided	None of these are provided
	Are drinking water facilities provided outside or adjacent to toilet building?	Yes		No
	Is drinking water available for both adults and people using wheelchairs or those of shorter height (0.75–0.80m)?	Yes		No
	Are waste bins easy to reach for everyone, including child-sized bins placed at 0.45–0.5 meters height?	Yes		No
SAFETY				
	Does the toilet have a janitor/security personnel? And do they have a dedicated space for keeping their belongings?	Yes	No dedicated space for belongings	No
	Are there shops or places nearby that bring people and make the area feel safer 24X7?	Yes	Not at all times of the day	No
	Are there CCTV cameras installed outside the public toilet covering all entrances and sides of the toilet?	Yes		No
	Does the toilet have electrical sockets?	Yes		No
	Are helpline numbers displayed on signs both inside and outside the toilet building?	Yes		No
	Does the toilet have lighting controls inside and outside the toilets?	Yes		No

INDICATORS	SCORING	1	0.5	0
LIGHTING				
	Is there enough lighting on the way to the toilet building?	Yes		No
	Are the entrances to the toilet facilities well-lit?	Yes		No
	Is the outside/front (facade) of the building properly lit?	Yes		No
	Is the lighting inside the toilet building provided for all areas?	Yes		No
SIGNAGE				
	Are clear direction signs placed within 150 meters of the toilet or near nearby landmarks?	Yes		No
	Do the signs clearly show the types of facilities available — like stalls for women, men, gender-neutral, accessible and family toilets, and drinking water points?	Yes		No
	Are there signs inside the toilet building on how to use facilities (e.g. sanitary napkin stations, garbage bins)?	Yes		No
	Do the signs include Braille and raised (tactile) information?	Yes		No
	Are all signages multi-lingual?	Yes		No
	Is the signage consistent in design throughout the park?	Yes		No
	Are the signs placed at heights that both adults and children can see?	Yes		No
	Are the signs easy to read, with good contrast, clear fonts, and placed in the right spots?	Yes		No

TOTAL TOILET SCORE: _____/ 53

TOILET

MEN'S TOILET ↑

↑ WOMEN'S TOILET

IC

IC

WC

WC

Reimagining the Everyday City: Designing for Inclusion

Greater Chennai Corporation Inclusive Design Manual, developed by the Greater Chennai Corporation and Gender and Policy Lab, addresses a vital question: What does inclusive infrastructure truly mean? Rooted in Chennai's unique realities and informed by global best practices, this manual is a call to action to design a city that works for everyone. It reveals how everyday spaces—from bus stops and markets to public toilets and beaches— can be made more accessible, welcoming and safe by design.

Combining rigorous field research with community insights, the manual offers practical design strategies for twelve key public infrastructure types. Each chapter unpacks barriers to access, comfort, and safety, and provides a checklist to assess and improve inclusivity. Designed for engineers, planners, architects, civic actors, and administrators, this manual is both a technical guide and a roadmap for creating a more equitable city.

design co:lab

GENDER & POLICY LAB
GREATER CHENNAI CORPORATION